

September 1991

# The National Locksmith®



## Special Safe Issue



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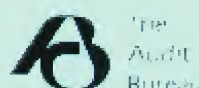
This section contains information about key control systems.

*Click on the article  
you wish to read*

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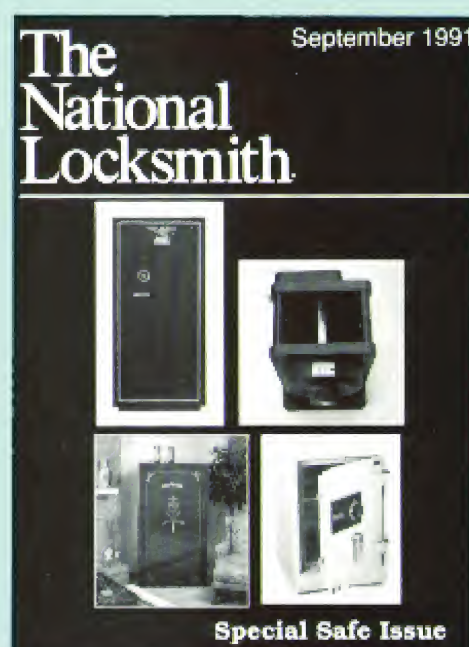
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#### On The Cover

The companies featured on this month's cover are: (clockwise from top left) Cannon Safe; MAS Hamilton; Gardall Safe Corp.; and Fort Knox Security Products. Our Safes and Safe Products Issue once again features a wide array of product in our special Product Review section beginning on page 33.



# Commentary

## Interviews With True Value

You have probably read last month's Commentary in which I described a series of locksmithing seminars which Ilco Unican Corp. is putting on around the country for True Value hardware stores. To repeat some of the facts: Ilco owns Locksmith Ledger magazine, as well as Simplex, PPI, Dominion, Taylor, and other divisions. The instructor teaching the seminars to True Value stores is listed in Ilco's literature as Steve Spiwak, who is also Features Editor of Locksmith Ledger.

The seminars being offered free to True Value hardware stores by Ilco are six hours long, offering training in the following topics: key blank identification, duplication, generation; lock disassembly and reassembly; plug removal techniques, including cylinder shimming and lock picking; methods for repinning cylinders including keying alike, keying different and masterkeying, and how to charge for these locksmith services.

Let me be very clear here. I do not think there is anything wrong with hardware stores learning how to key locks alike, or even with manufacturers and wholesalers selling to hardware stores. That will not radically change the income of any locksmith. It is the *comprehensive* nature of the Ilco seminar teaching a *wide range* locksmith services which is being questioned by many locksmiths. Other companies are helping hardware stores learn to sell product. No problem. But, I believe Ilco is teaching them to sell *full locksmith service*. That is the problem.

Recently, I interviewed several people who have first hand knowledge of the Ilco seminars. I spoke with True Value personnel who attended a seminar held in Georgia during July. Before we proceed, I must state that the individuals I spoke with were interested in bettering their own businesses, and I consider them to be fine people. No one can blame them for wanting to take advantage of this "profit building" opportunity offered to them.

Scott Hobbs is Assistant Operations Manager, Kotter & Co. (True Value's distribution system), Atlanta Regional Distribution Center. Hobbs is an executive at the Kotter warehouse where a seminar was presented to about 30 True Value store personnel. Following is an interview with Mr. Hobbs.

*TNL: Did the guys enjoy the seminar?*

Hobbs: "Everybody there seemed to be really into it. They took a hands-on approach and everyone got into it."

*TNL: Will this allow True Value Hardware to offer really effective locksmith service with this kind of training?*

Hobbs: "I would say so. What I understand now is that they are looking to put on a more advanced seminar as well. This was just the tip of the iceberg. Remember that most of the people there were totally new to the locksmithing environment. This was just a stepping stone."

*TNL: Were there tools for the people to use?*

Hobbs: "Each person that attended the seminar was provided with a set of tools and a pin kit. They were not given to us, but we used them for the duration of the seminar. There were all kinds of order forms available to place orders for the tools, including hand tools and lock picks...the whole gamut of tools we used there at the seminar."

*TNL: How did the people react to the lock picking?*

Hobbs: "It was fun, it was a challenge. Everybody really got into it. It got to be a real competition between different tables of people. We got to have a bit of a contest. It was a lot of fun."

**Continued on page 88.**



*Marc Goldberg*  
Editor/Publisher

September 5



# Letters

## Comments, Suggestions and Criticisms

*The National Locksmith is interested in your view. We do reserve the right to edit for clarity and length. Please address your comments, praise, or criticism to Editor, The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107. All letters to the editor must be signed.*

### Reader Appreciates Beginner's Corner

Dear Marc:

I just read Gene Gentry's article in this month's issue of *The National Locksmith* on the subject of re-keying Kwikset. The article was super and I am sure many readers appreciated it. This is the type of basic articles that the new locksmith can really use. I still consider myself a newcomer to the craft, even though I have been doing locksmithing part time since 1979. Last year I retired from my prior career and started locksmithing full time. I wish I had your article a few years ago; as I could have saved myself some time. I had to learn most things like this the hard way.

It took me a long time to realize that the end of the Kwikset tool was perfect for pushing the C clip off.

I am working on my own in an area of about 12 to 13 thousand homes in

adult communities. The majority of them have the Kwikset 400 type knobsets, so I get a lot of re-keying and replacement work. Also a lot of installation of 660/665 deadbolts. I just wanted to add a comment or two on the information in the article.

I have a simple solution to the common question of dumping pins vs plug follower use. On Kwikset in particular, I always dump the pins and springs and replace them with new. One reason I do this is because the cover is so easy to remove, unlike some types that are staked. The second reason is that most of these locks were installed by a single builder and are still masterkeyed. The third reason is that I feel that part of re-keying is to clean the cylinder (especially of all the graphite that has been squirted in by well-meaning homeowners.) I feel that the cost of five pins and springs (assuming the bottoms are being replaced anyway) is not worth the time spent examining them for condition.

The removal of the cylinder with the removal tool also caused me some problems until I realized that rather than rapping the tool against the spring clips, a slight push in on the cylinder before pushing on the tool will cause the clips to release very easily.

As I said before, articles like yours

are good because they deal with some of the hardware that a beginning locksmith will work with, as opposed to the expensive commercial installations.

Bill Staples  
New Jersey

### Manufacturer Praises Roberts' Article

Dear Marc:

I want to take this opportunity to thank Jack Roberts for the article he wrote on "Multi Lock" in the July issue of *The National Locksmith*.

The language used to describe the lock was more in the vernacular of the locksmith, than what I use as a manufacturer. The article was more articulate, and covered all of the aspects of the various combinations possible, using just the one die cast aluminum case.

I hope in the future I can meet Jack at one of the ALOA meetings, where I can personally thank him.

Jerold R. Ford  
Multi Lock  
Florida

### Concern For "True Value Training" Applauded

Dear Marc:

*Continued on page 8*



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Continued from page 6

In response to your letter dated of July 18, 1991 regarding the intent of Ilco Corporation to provide locksmithing seminars to employees of True Value Stores across the nation let me say "Thank You" for your concern. I have no doubt that you (and certainly the *Locksmith Ledger*) will receive thousands of angry, indignant responses.

I trust that none of these responses will come from the locksmiths of Florida who chose not to study or even read the legislation which was supported by the Florida Locksmiths Association in 1990. The majority of Florida locksmiths chose either to ignore the legislation or to oppose it. Unless and until locksmiths become sophisticated and professional enough to read, think and act for themselves it is unrealistic to expect manufacturers to totally depend on them and protect their "rightful" market.

Diane L. Deily  
Florida

## ALOA Member Opposes 'Six Hour Locksmiths'

Dear Marc:

Thank you for the opportunity to review your article "*Will True Value Hardware Stores Replace The Locksmith?*" As Chairman of the Keystone Chapter of ALOA, I must go on record as opposed to Ilco Unican Corporation's training of hardware store personnel in the trade of locksmith services. We already have some True Value stores in Southeastern Pennsylvania offering locksmithing services. I have seen the type of work they do, such as filing plugs and pins because they don't have the correct tools or parts to work with.

No one can be taught the locksmith trade in six hours! We also think that lock picking should not be taught outside the locksmith trade. We locksmiths have a hard time now competing against the home centers. The local True Value Hardware Stores are everywhere. This will effect all locksmith companies large and small in their ability to make a living.

This idea by Ilco Unican will effect

the locksmith wholesaler. Because the True Value hardware stores will buy their product from their own network of distribution centers, and not from a locksmith wholesaler as we do, this will also have a large effect on our wholesalers. And may even put some of them out of business.

We are also opposed to the Audit Bureau of Circulations eliminating the Hardware category. We are locksmiths, not hardware stores.

We also would like to say thank you to *The National Locksmith* for not marketing your magazine to hardware stores, and keeping for the locksmith trade only.

Barry K. Leas  
Pennsylvania

*Editor's Note: As I have stated before, I am not concerned with anyone who sells products to hardware stores. Or even trains them to do keying alike of simple locksets. What we have to be concerned about is the teaching of lock picking and full-range locksmith service. I know of no other company providing such training, other than the one we have discussed.*

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# Technitips

Helpful Hints from Fellow Locksmiths



Send me your Technitips. Who knows, you may be our next winner! c/o The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107.

by Robert Sieveking

*Congratulations to all those who find their Technitips printed here this month. All of these Tips show originality. Of all the things a locksmith must be to succeed in business, he must be creative.*

*I listened to a speaker recently, who made the statement that, "You can never put your foot in the same river twice." What he went on to explain was that as soon as you removed your foot, the river would move on. The water you enjoyed the first time, is gone. The water you find the second time is never the same. The locksmith trade is much like the river in our analogy. It is constantly changing.*

*If we study constantly, we can "keep up." If we become satisfied with our knowledge or performance, we*

*immediately began to fall behind. How many locksmith books have you bought and studied this year? Have you upgraded the quality of your tools or added a few new code books with the new foreign codes in them? Have you contributed a few discoveries to the rest of the trade, in the form of a Technitip or two? Are you growing and moving ahead?*

*Everyone agrees that professional-*

*ism is important. There are as many opinion on what constitutes a professional as there are locksmiths.*

*How do you define professional? Send me your idea of what you think a professional locksmith should; 1. look and act like, 2. know, and 3. be able to perform. No more than 100 words please. If we're going to be professional, let's define professionalism.*

## Win a VATS Decoder From All-Lock!

Each month, All-Lock will award one of their A-7000 VATS Decoders and an A-7001 Adaptor to the best automotive Technitip submitted this month. If you would like a chance to win a free decoder and adaptor from All-Lock, simply submit your automotive tip exclusively to *The National Locksmith*. Tips submitted to other publications cannot be considered.

All-Lock's A-7000 makes it easy to diagnose system failures, service the column and select the correct key blank. This sophisticated tool is easy to use and is completely portable. Long wire leads are easy to use in cramped automotive situations.

Submit your tip, and win today!



## How To Enter

All you need to do to enter is submit a tip, covering any aspect of locksmithing to *The National Locksmith*. Certainly, you have a favorite way of doing things that you'd like to share with other locksmiths. Why not write it down and submit it to: Robert Sieveking, Technitips' Editor, *The National Locksmith*, 1533 Burgundy Parkway, Streamwood, IL 60107.

Tips submitted to other industry publications will **not be eligible**! So get busy and send in your tips today. You may win cash merchandise, or even one of many key machines or code book sets! At the end of the year, we choose the winners of the listed prizes.

Last year dozens of people walked off with money and prizes. Wouldn't you like to be one of the prize winners for 1991? Enter today! It's a lot easier than you think!

## Every Tip Wins 'Locksmith Bucks!'

Yes, every tip published wins a prize. But remember, you must submit your tip to *The National Locksmith* exclusively. Each and every tip published in Technitips wins you \$25.00 in Locksmith Bucks! Use this spendable cash toward the purchase of any books or merchandise from *The National Locksmith*. You also receive a Bonded Locksmith bumper sticker and decal. Plus you are now eligible for the really big prizes!

## Best Tip of the month prizes!

If your tip is chosen as the best tip of the month, you will win \$50.00 in cash as well as \$35.00 in Locksmith Bucks! Plus you will receive a quartz Locksmith watch, a Bonded Locksmith bumper sticker, decal and a Locksmith Cap. Plus, you may win one of the annual prizes.



*Enjoy the Tips! And send me yours today. Winning a key machine was never so easy! Every month you think about sending me that great idea of yours. Right now, grab a pen, write it down, and send it to me. Your chances of winning prizes are great! Send Tips to Bob Sieveking, The National Locksmith, 1533 Burgundy Pkwy., Streamwood, IL 60107.*

### September's Best Tip

Just a short Technitip, to let other locksmiths know one of the ways to keep in touch with their clients.

After a job is completed, we send them a letter thanking them for allowing us in their business (or home or in shop lock work or opening their car or home). We explain our other services and enclose a few cards for their use and referrals. This way we are on top of all calls and potential later customers appreciate our thanks.

Once a year, on the month we worked on the locks, we send them an anniversary letter reminding them to lube the locks and check the

adjustments and if there is any trouble to call us and we will give them an anniversary gift of 50% off the service charge within 30 days of the date.

We have a lot of regular customers from this and friends also.

W.S. Kase  
California

\*\*\*\*\*

### Automotive Tip of The Month

I have a small locksmith shop here in the boondocks of Maui, Hawaii. Being on the fringe of the US we truly appreciate all the information we receive from your publication.

One of the biggest problems I have run into concerns probe lights used to illuminate the inside of car doors for opening. Bulbs seem to blow out after only three or four uses. Replacement bulbs are quite expensive. Finally, after spending a small fortune, I decided to build my own probe light, using Radio Shack parts. I succeeded in building an inexpensive, tough and reliable professional tool, which I would like to share with your readers. Photograph



1. Economical probe light.

one shows the finished product.

Basically, a 6V @25ma bulb is mounted to the end of a piece of #10 copper wire. The #10 wire acts as one of the wires for the miniature bulb, while a piece of bell wire is used to carry current to the opposite wire of the bulb. A battery pack, designed to hold eight AA batteries supplies 12V power for the lamp. The #10 wire extends down the side, and under the bottom of the battery pack, so that it can be taped securely together. A snap type battery connector, attached to the #10 wire and the bell wire, act as a switch, to make it possible to disconnect the batteries from the lamp.

The whole "Pro Probe Light" is wrapped with black electrical tape,

*Continued on page 14*

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Continued from page 12

from the base of the lamp to the end of the battery holder. Re-wrap the battery holder/handle with Duct tape for a more durable grip. When the batteries wear out, unwrap the battery holder to replace them. The whole rig only costs about \$3.00 to make, and replacement bulbs are only \$1.09.

Marty Murphy  
Hawaii

\*\*\*\*\*

Recently I was called to unlock a condominium for a customer that locked his keys inside. I showed up at the address he gave me. After checking his I.D. and making sure it was his residence, I walked up to the lock that was on his front door. The lock was a heavy duty Schlage, with a six pin plug. I attempted to pick it, but had no luck. The only other I could think of getting in was by drilling the lock. This would cause a problem, because I did not have a replacement cylinder with me.

This was when I got an idea. I walked around the building and noticed he had a patio door. I attempted to lift the door, hoping to bypass the lock and enter, but the lock would not disengage from the strike. I decided to try the following method. It worked like a

charm, and I was in within minutes.

First, I taped two Slim Jims together so they totaled about 4' in length. This was slightly longer than the width of the door. Second, I tied dental floss to one end of the two Slim Jims (about 5"-6"). Third, I pulled the patio door out toward me, just enough to slide the Slim Jims between the two doors. (Slide the end inside that the string is tied to.) Next, I pushed the Slim Jims in, until they reached the locking lever, and holding the string with one hand, I was able to wiggle the Slim Jim, so as to wrap the string around the locking lever. After the string was securely wrapped around the lever, I held the string and Slim Jims in the same hand, and pulled downward. This pulled the lock lever to the unlocked position. Some locked doors may pull up instead of down to reach the unlocked position.

After gaining access with the method I just explained, you have the perfect opportunity to sell your customer on additional patio door locking security.

Ray Reding  
California

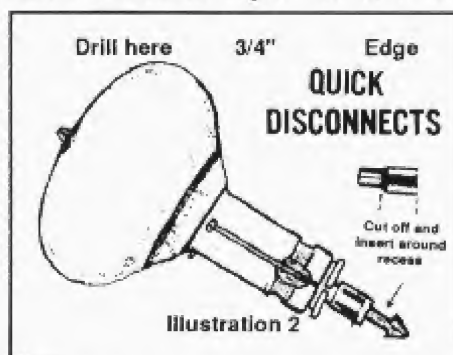
*Editor's Note: This Tip will only work in cases where the sliding door is mounted with the active door on the outside. Doors are normally mounted*

*with the active door on the inside.*

\*\*\*\*\*

I am sending this Technitip because I think it is a good tip. It sure has helped me. It concerns the Ford 10 tumbler ignition lock.

Remove the cover from around the column and measure 3/4" back from the edge of the lock (see illustration 2.), below the center top of the column.



This will put you dead center on the sidebar. Use an angle drill, and a 1/16" drill bit to drill down 3/8" to the sidebar. Take a wire and press down while raking the wafers. The sidebar will go down, then turn the lock and depress the retaining pin to pull out the ignition. Take the sidebar out and stick

Continued on page 16

# NATIONAL

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Continued from page 14

a blank key in to read the wafers and make the key. Use liquid solder to fill the hole in the column.

Guy Howard  
Kentucky

\*\*\*\*\*

This tip provides a tried and proven method to gain access to the Pontiac Fiero door locks, whenever it becomes necessary or desirable to either repair, replace, or recombine them. To perform this job easily, first remove the inside door trim panel and set it aside. Next, remove the trim strip that is in the middle of the outside door panel. Next, remove the screw and trim clip to the immediate left of the outside door handle. (The screw is right on the passenger door.)

Now look inside the door. Adjacent

to the door lock retaining clip is a hard rubber support, formerly held in place by the trim clip screw. Remove this loose support. The lock retainer is now accessible. Remove it and service the lock in the usual manner.

William R. Weaver  
Georgia

\*\*\*\*\*

Here are two Technitips concerning the Workbench that should prove helpful to any locksmiths. Take the magnet off a broken or damaged "Hide-A-Key" and give it to your workbench. Leave your shims on the magnet, and they will stay put.

Second, save those broken fishing rods. There is a simple and effective way of having the proper following tool for those hard to hard to fit cylinders. Use a broken fishing pole, preferably

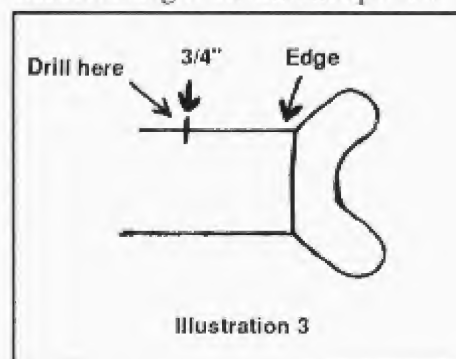
the hollow fiberglass type, and cut it into four inch sections from the butt end to the tip. You now have a selection of following tools to fit a wide variety of cylinders.

Les Kitchings  
South Carolina

\*\*\*\*\*

I've been servicing 8-Line Sargent entry locksets for 18 years, and recently had my first request to convert one to a store room function. The method I used, allows a simple return to the entry function, if desired.

When the lock button is pushed in, the push rod, inside the knob, is extended 1/4", thereby locking the outer knob. The push rod has a short head on the end, with a reduction in size behind it. (See illustration 3.) I used the soft thin metal from a push-on electrical wire lug, and pressed it into the recess behind the head, molding it evenly around the shaft. This blocks the shaft from returning to the unlocked position.

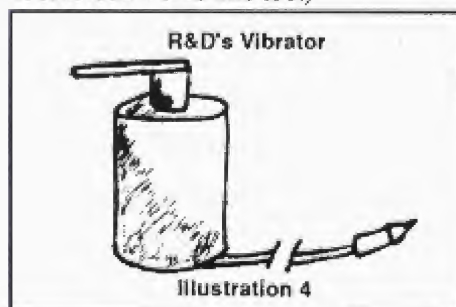


No other alteration of the lock is necessary, and the door can only be unlocked from the outside by a key or from the inside by turning the inside knob. To restore the lock to the entry function, simply remove the soft metal sleeve.

Larry Wright  
South Carolina

\*\*\*\*\*

I've found another use for the electric vibrator that is sold by R&D Tool company. It was originally sold for use in their method of picking GM locks. (See illustration 4.) (An electric toothbrush works fine too.)



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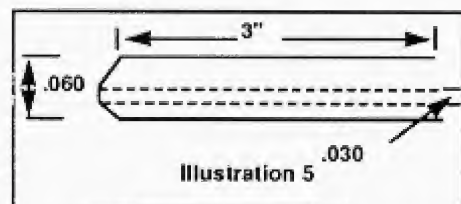
On Ford 5 pin ignition locks, sometimes the springs will become weak, and a customer's key will not work the ignition. The problem is compounded by the ignition being mounted upside down. Lubricate the lock well, insert the customer's key, and vibrate the lock, just as if you were picking it with R&D's pickset. The pins will pop upward, and open the lock. The vibration also loosens broken buzzers and other foreign matter lying in the bottom of the lock if used before trying the customer's key.

R. Lazich  
Wisconsin

\*\*\*\*\*

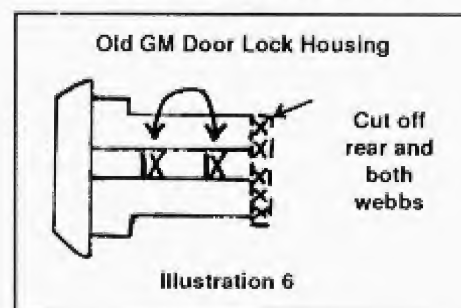
Here is a method that I have used to decode GM door and trunk locks.

Take a piece of copper tubing .060" diameter, with a .030" hole (inside diameter). Cut a piece 3" long, and file a taper on one end, as in illustration five.



Next, cut a piece of .030" music wire 3.300" long and slide it into the tubing.

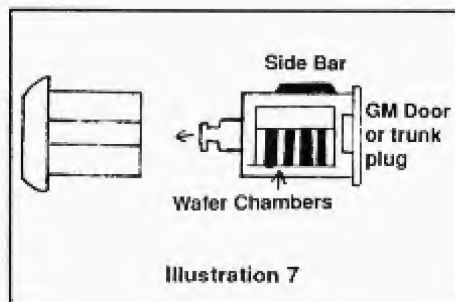
Take a GM door lock housing and cut about 1/16" off the rear. Also cut the two webs where the spring retainer cap would be, as in illustration six. Pin



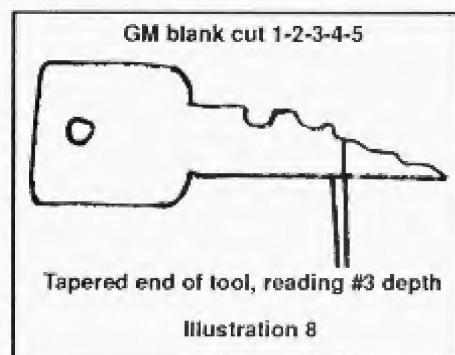
the GM plug to 1-2-3-4-5. This plug you can use to check your gauge, and practice. Cut a key to be used as a gauge on your clipper or code machine to 1-2-3-4-5.

Now pick your plug and hold the sidebar in, as you carefully push it into the cutoff end of the housing, as in illustration seven.

With the rod in the tubing, and with the tapered end of the tube resting on the web between the wafers, push the rod down until it rests on top of the #1 wafer. Carefully remove and place the other end of the tool against the bottom



of your GM key, as in illustration eight, and match the end of the rod to the depth in the key for that cut. Do all 6. Add the depths of the cuts. The sum should add up to an even number, and adjacent cuts no greater than 2.



Note # by checking with the plug you pinned to 1-2-3-4-5. You can file

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# Newsletters

## New Products and Industry News

### ALOA Designates October "Lock In Safety Month"

The spotlight is on security as the industry gears up for Lock In Safety Month. This massive ALOA-sponsored consumer awareness campaign, designed to reinforce the image of the professional locksmith as a security specialist, is planned for the month of October, with preparations well underway.

The Lock In Safety program represents a first-ever industry wide effort to promote locksmiths, their services and products. Manufacturers, distributors, locksmiths and other related organizations will contribute to the Month's success, using ALOA-provided materials in conjunction with their own individual advertising and promotions.



Timed to coincide with National Crime Prevention Month, the ALOA

promotion will run during a period when security is a focus of consumers.

To further awareness, the event will be publicized through advertising and publicity in newspapers, national magazines, trade publications and broadcast media. In addition, the CBS radio network has extended special discounts for commercials run during this period. All ALOA member locksmiths and participating distributors will automatically receive a Lock In Safety Month kit.

Circle 289 on Rapid Reply

### Jet's Key Blank Comparison Booklet

A new "Key Comparison" four page booklet is available from Jet Hardware Mfg. Corp., listing close to 900 numbers which cross over Ilco to Jet.

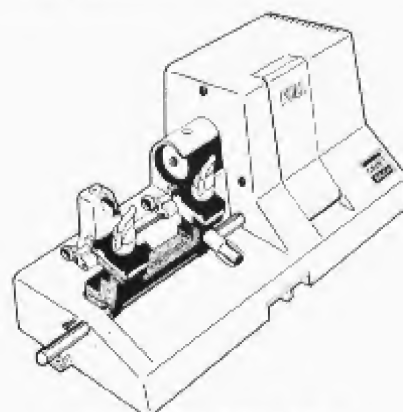
This publication has been uniquely designed so that it not only crosses Ilco to Jet directly, but it displays all substitutions which may be made if the exact key blank is not readily available from the locksmith's inventory. The booklet is available from Jet or any authorized Jet locksmith supply distributor.

Circle 290 on Rapid Reply

### Silca's Semi-automatic Cadet Key Machine

The Cadet is one of the newest additions to Silca's line of duplicating equipment. The Cadet was designed to be an economical, lightweight, cylinder key duplicating machine that can be used in the shop or as a portable unit. The space age housing keeps the machine weight at under 18 pounds and the carriage locks into a rest position to avoid damage during transport.

The Cadet also features a spring tension carriage and a unique drive lever for semi-automatic operation, an a modern nylon brush for deburring. Use the two sided reversible jaws to hold a variety of keys. A removable chip tray is also provided.



Circle 291 on Rapid Reply

Continued on page 20

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Continued from page 18

## Gardall 1511 Tops "Consumers Digest"

Consumers Digest reported a "Home Security Buying Guide" in their August 1991 issue. Various security products were reviewed and in the "Home Safe" category the Gardall 1511 was ranked Premium Selection Best Buy.

If Safe Dealers are interested in obtaining a copy of the article, please contact Gardall Safe Corporation.



Circle 292 on Rapid Reply

## AWI Announces \$25,000 Winner

AWI has announced that the winner of the \$25,000 Giveaway is Frank Abate of Enterprise Lock & Safe, Inc. in Pinellas Park, Florida. The drawing was conducted during the recent ALOA show in Anaheim, California.

A company spokesperson noted that the giveaway was part of the AWI 25th



The \$25,000 AWI Giveaway check is being presented to Frank Abate (center) of Enterprise Lock & Safe in Pinellas Park, Florida by Charlie Armstrong (right) and Dave Matties (left) of Southern Lock & Supply Co., the local AWI distributor.

year celebration. "We have had tremendous excitement and interest in our AWI \$25,000 Giveaway," said the spokesperson "and we just wanted to

express our appreciation to all our locksmith customers for 25 years of loyalty to AWI cylinders and products.

Circle 293 on Rapid Reply

## Mexican Manufacturer Selects Hoffman As Agent

Productos Metalicos Alba S.A. the largest manufacturer of key blanks in Mexico, has just announced the selection of Hoffman Marketing & Distribution, Inc. of Farmingdale, NJ as their U.S. and Canadian agents. This step is part of Alba's long term commitment to offer their products to U.S. and Canadian locksmiths.

Alba, producing metal products and key blanks for over 50 years, has specialized in producing high quality residential and automotive key blanks.

Circle 294 on Rapid Reply



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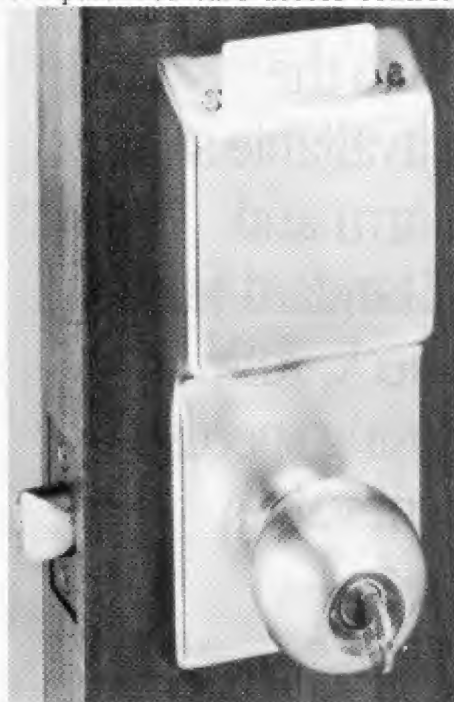
[Click here for more information](#)



Continued from page 20

## Yale Electronic's New Cardcode

Yale Electronics' new Cardcode access control solves the problems of keying and re-keying and eliminates high cost and complexity of computerized card access control



equipment. The convenience, simplicity, and cost savings of Cardcode offers substantial value in the business marketplace.

Cardcode is designed to meet the needs of any size business, both large and small for installations of one door, or 1000 doors. As many as 150 keycards—in any combination of employee or executive cards—may be validated for use at any given lock.

Keycards are programmed at the Yale factory and supplied in identical pairs. One is issued to the card user; the other is kept in a key record file. First a programming keycard is inserted in the lockset, then the user keycard. This validated the user keycard for access. The validation may also be invalidated just as easily. The validation and invalidation procedures may be repeated for any keycard as many times as needed. The same keycard may be used indefinitely.

Circle 295 on Rapid Reply

## Leather Belt Hooks From Lucky Line

The double leather hooks from



Lucky Line can snap on or slip on. Made of rugged leather, both belt hooks feature a clip which allows the removal of keys. Snap the No. 455 over a belt, purse strap or similar item. The No. 456 is rivetted and must be slipped through the belt.

Circle 296 on Rapid Reply



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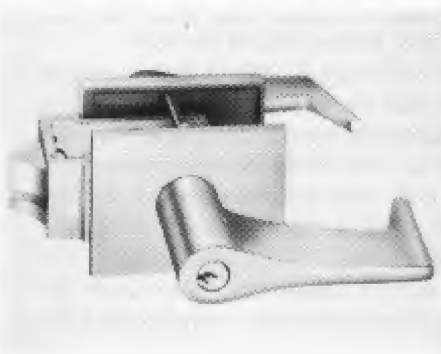
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### Russwin Introduces New Lever Design

Russwin Architectural Hardware, a Black & Decker Company, has introduced the new 912R lever design with the 500 series Unilock. This new contemporary design complies with State and Federal handicap codes and is available with standard or removable core cylinders.

The Russwin 500 Series is an extra heavy-duty pre-assembled lever lock that is ideal for high use commercial locking applications. The 912R Unilock lever design complements the complete line of Russwin locksets, exit devices, door controls and key systems.



Circle 297 on Rapid Reply

### Abloy Announces "Best Buy" Award

Abloy Security, Inc. was recently honored by having its Model 2784 deadbolt recognized as a "Best Buy" in *Consumer Digest* magazine. The publication went on to state that "the Model 2784 is stylish and offers more convenience and security features than any other deadbolt."

To learn more about this deadbolt and the entire Abloy high security product line, contact Abloy Security, Inc., Dallas, TX.

Circle 298 on Rapid Reply

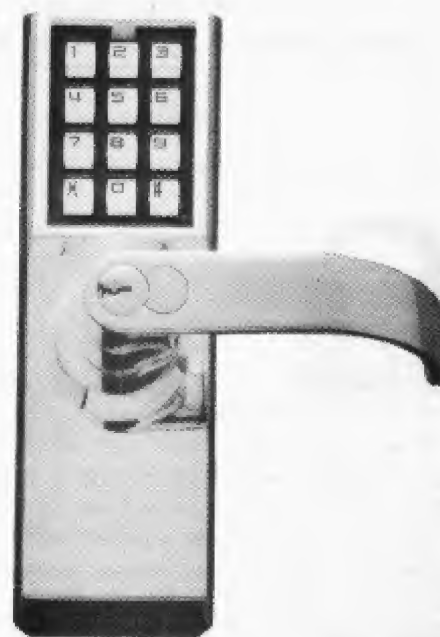
### Unicore Introduces JKL Lever Lockset

Unicore offers the JKL lever lockset. This lever lockset is attractively designed, available in brass, antique brass, chrome, and satin chrome finishes. JKL mounts over the existing hole.

The keyway provides an "override" to the "keypad." Five different four digit access codes are user

programmable. They are also easily changed if you know the settable "master code."

The keypad is powered by 4 AA batteries with a two year average life or 20,000 entries.



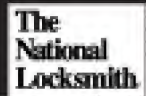
Circle 299 on Rapid Reply



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***We have Security***  
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# The Happy Mosler

"A Mosler opening where everything goes correctly is almost unheard of and is unexperienced by me. This was an exception!"



by Dale Libby

**C**an one really use the word "Happy" when referring to a Mosler safe or money chest opening? Sometimes, one can have a perfect safe opening, where everything goes correctly. When in reference to a Mosler unit, a safecracker can be delighted if it only takes two hours longer than expected. A Mosler opening where everything goes correctly is almost unheard of and is

unknown to me. This, however, was the exception.

First, let me sing the praises of Mosler. They have, for many decades, manufactured "top of the line" safes, vaults, and money chests. They have been in the bank equipment line for one hundred years or so. Their name is to be feared and respected. In fact, I have on my business card imprinted "I ain't afraid of NO Mosler." Mostly, it is for the benefit and humor of other locksmiths. Once I explain to the customer that Mosler represents one of the best American made safes, they are impressed by me and my card.

The happy opening took place at a major catalog store with a large and nasty Mosler TL-30 money chest about

4 feet high, 4 feet wide, and 4 feet deep, with 2 inner compartments. I knew this for a fact, since I had worked on this unit before. What astounded me was the absence of any Mosler markings on the safe and a Sargent and Greenleaf dial and ring on the front of the unit.

I correctly surmised that someone else had worked on this unit and had replaced the combination lock, dial and spindle. The customer informed me that the lock was working correctly, but the safe would not open. I tried the combination. It did work correctly, but the handle would not move once the combination bolt was retracted and the

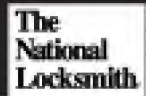
*Continued on page 26*



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Continued from page 24

dial stopped on number 95.

Just from the external investigation, I knew that the relocking device had been activated and was keeping the boltwork from moving to the open position. A relock trigger is internal to the lock, and a relocking device is external.

The real giveaway to the positioning of this lock (vertical up) is the distance between the handle and the center of the dial. On Mosler units like this, the distance is exactly 4". The handle on this unit was a squared off Mosler handle, mounted horizontally.

If you are really interested in making safe opening a part of your occupation, then you must invest in the complete set of Safe Opening Guides that are published by *The National Locksmith*. They were written and photographed by Dave McOmie. The other thing that must be done to be a safeman is to get some education! This can be done at locksmith conventions and regional locksmith association meetings. Several courses are also available that are very good, both resident and correspondence. Education is a must, and not just "on the job" training and mistakes.

As can be seen in both Vol. I and II

of the *Guide to Safe Opening* (In the section devoted to Mosler safes and chests) the relocking device is adjacent to and parallel with the combination lock body. A plate that fits over the back of the lock holds the metal rod in place with the case cover screw holes. If the dial is punched, the plate moves and the rod springs up to block the movement of the opening bolts.

As relockers go, this one is simple to figure out. Dave gives some measurements in his book on the location and the best place to drill to deactivate, but in the future, I would add about 1/8 inch to the first measurement, and about 1/2 inch to the second or VU measurement. In this location you can drill outside the S&G dial ring and not have to replace it when repairing your drilled hole.

The theory of opening this unit is to drill for the rod and push it down to release the boltwork. That is the theory. Once at the rod, how does one push it down, or even drill it into two pieces? The answer sprang to mind as soon as I saw the rod.

First, I drilled through about two to three inches of soft steel until I met the smooth Mosler hardplate. I then got out my Lee drill rig and Strong Arm drill bits to make it through the rather formidable smooth and non-Relsom hardplate. Another 1/4 inch of soft steel and I was at the rod, almost perfectly.

When you drill through inches of metal and hardplate, and hand drill, sometimes you do not come out at exactly the correct place. That is why I added a little to the recommended measurements, not for everybody, but for myself.

Once I made my hole into the inner sanctum at my measurements, I was not happy to see just the edge of the relock rod at the left side of the hole. I could not get a grip on it, punch it, or move it down. It did move when I tried the handle, so I was confident that my hypothesis was correct about it being the culprit and keeping the unit locked.

The solution to the opening and pushing the bar down came in a flash of insight. I put the drill back in the hole, pushed the reverse button on the drill motor, leaned into the drill bit, put upward (clockwise) pressure on the opening handle and turned on the drill. The drill bit turning backwards grabbed the locking rod, moving it downward enough to get the handle up and the safe opened.

I had used the drill bit to supply the

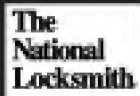
Continued on page 28



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Continued from page 26

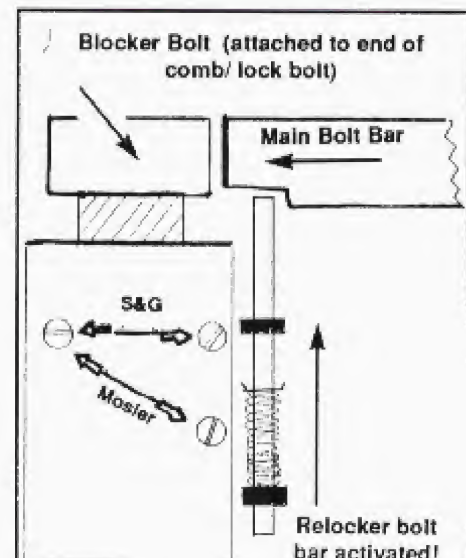
downward movement. If I had drilled the hole and the rod was to the left of the edge of the hole, I would have used the bit turning clockwise to move the rod downward.

I was anxious to see what the problem was with the relocker and just why it had been set off. I was rather dismayed at the answer. The person who had replaced the combination lock, dial and ring had not bothered to modify the relocker plate for the S&G lock. This plate was held on by only one case cover screw. When the screw

became loose, it allowed the relock retainer to move and set off the outer relocker.

I can't understand why anyone would let this happen. To retrofit the lock in the first place, the safe technician had to drill and tap for the block bolt that fit on the end of the regular combination bolt. (See illustration 1.) After doing all this work, all he had to do was to drill another 3/16" hole in the retainer plate and the relocker would not have been set off.

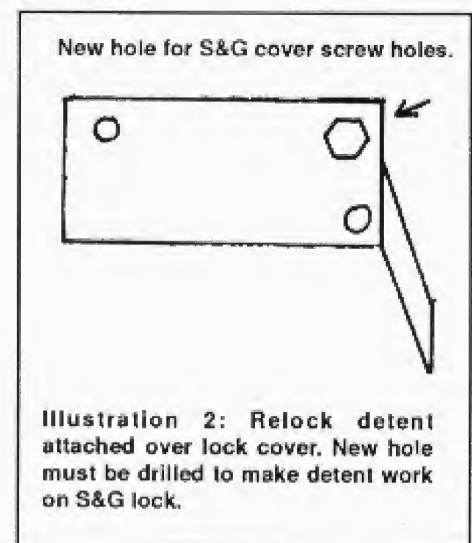
On Mosler covers, the two back cover screws are located at about 10



**Illustration 1: Representational View. Activated relocker bar blocks main bolt bar from moving to the right. S&G Cover screws are across from each other, Mosler offset.**

and 4 o'clock, while on S&G, LaGard, and other combination locks, the screws are located across from each other at 9 and 3 o'clock on vertical up (VU) locks.

To correct the mistake made by the previous person who replaced the lock, I just drilled a new hole in the retainer cover and used a screw with a lock star washer (8/32) in the second cover screw hole. (See illustration 2.) This held the relocker in perfect position. I filled and ground down the hole I had made in the door with a hardened steel die pin, and all was well.



It took about 45 minutes for the entire job. I had to remove the dial and ring when fixing the front of the door, and I changed the combination of the combination lock. Time well spent. Open and Prosper! \$

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## The House of Safes

"Imagine you had your own large safe showroom packed full with every type of safe imaginable, and staffed by knowledgeable sales people."

Wouldn't it make selling safes easy and profitable for locksmiths if each of you had your own spacious showroom packed full with every type of safe known to man? After all, you would not have to leave the details to your customer's imagination.

Questions such as how big a safe do I need and which safe is best for my needs become easy to answer when you stock dozens and dozens of different containers.

Also imagine that your safe showroom is staffed by knowledgeable personnel, equipped to answer most any question. The people in your showroom are helping YOU make the sale, to help your business make profits.

Well, locksmiths in the Chicago metropolitan area don't have to wonder what this dream would be like. They can experience it first hand because of H. Hoffman Company's safe showroom/warehouse called The House of Safes. This location is separate from the wholesaler's lock and supply warehouse.

The House of Safes is conveniently located near major highways, easily accessible. The idea behind the showroom is to encourage area locksmiths to use it as if it were their own private domain.

Steve Hoffman, general manager, explains that when a locksmith makes an appointment, he brings his retail customer to the showroom. The locksmith uses the showroom as though it were his own location, showing customer's the products, and the full inventory which is on hand.

In fact, if the locksmith desires, Steve Hoffman will use his expertise to help close the sale of the appropriate safe to the customer. Steve points out that The House of Safes never sells direct to the locksmith's customer. In fact, members of the public are not even permitted inside the building unless accompanied by a locksmith. However, if the locksmith desires, he may make an

appointment for his customer to go over to the showroom. If the locksmith cannot be present, showroom staff will guide the customer through the sales process, always being mindful that in this instance they are working for the locksmith who sent the customer.

"We want the locksmith to use The House of Safes as his own showroom. He is the boss here, in charge of the process. When I am showing a customer a safe, I am working for the locksmith," comments Steve Hoffman.

He further notes, "Just about every business needs a safe, and it is very profitable to sell them. But many locksmiths do not handle safes due to lack of space or product knowledge. The locksmith already has commercial accounts who need a safe. The typical profit margin for a safe is quite high."

Steve cites a wall safe which sells retail for \$240, and costs the locksmith only \$144. From sales to delivery, the showroom is equipped to handle the entire sales process, with the locksmith completely in charge. H. Hoffman believes this program will aid locksmiths in selling more safes, and thus add to the



A sampling of the inventory available...

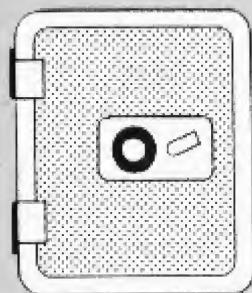
locksmith's profitability.

For more information contact: The House of Safes, 9551 Berwyn, Rosemont, IL 60018, (708) 671-5999. §



...In The House of Safes showroom.





# Information

## Safe

In this section you will find a number of products by various safe manufacturers. As a locksmith, you offer security of many kinds to your customers. Many of you already handle safes; some of you do not. However, almost all of you do know that selling safes can be a profitable experience for a locksmith company. First there is the profit on the original sale. Then there is the follow-up service you can offer. Calls such as combination changing can really help pay the rent.

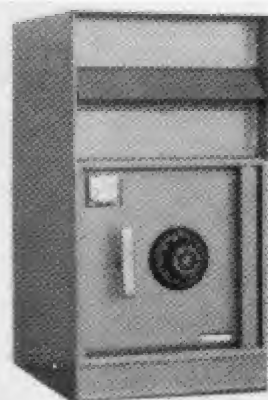
In this product review section we have tried to bring together a representative sampling of

the safes that are offered to the trade. Of course, it is impossible to have every manufacturer represented here. But we have tried to assemble a good sampling of material for you to examine.

If you feel you need more information about any of the items presented here, please use the Rapid Reply Card to request literature. You will find the reply card between pages 92 and 93 of this issue. If you do not currently handle safes, give it some thought. You might be overlooking a product line that could add to *your* bottom line. **MG**

### Adesco's Front Depository Units

Utilizing their time proven fish resistant rocker box depository design, Adesco now offers front depository safes. The rocker box design with 1-1/4 x 11-1/2 x 7 inch deposit capacity provides maximum fish protection. Since there is never a clear opening into the safe during the deposit cycle, surreptitiously removing deposits is virtually eliminated.



Circle 240 on Rapid Reply

### Ambassador Safe Adds To Line

Ambassador Safe Co. adds three new digital combination safes to its line of quality imported safes, bringing the total number of fire safes available to 24.

Standard features of the digital lock is its ability to be powered by 4 1.5 volt batteries, the combination being changeable to any four numbers and a key lock is also available.

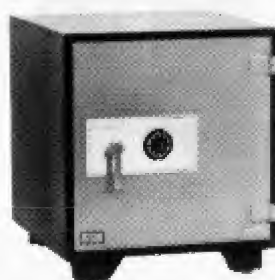
Replacement Korean combination locks and key locks are also available.



Circle 241 on Rapid Reply

### Amsec's Record Safes

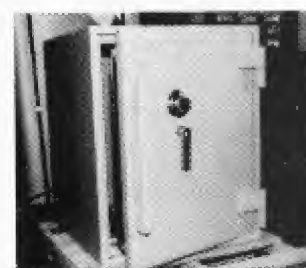
Amsec's home and office record safes are now constructed of galvanized steel, eliminating any possibility of moisture damage. Removable casters are also standard on all models ranging from a small 1310 to a large 4118. Amsec has also developed a new bolt-down kit retailing for \$30.00 to be used with the new units that have steel skirts surrounding the casters. It is extremely secure and easy to install.



Circle 242 on Rapid Reply

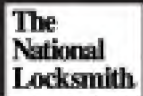
### Armor Safe's Composite Safes

Armor Safe Corporation is proud to announce a new series of TL-15 and TL-30 money chests and a new composite safe line which will soon be available. This new series will assist dealers in this very competitive market. These money chest have a completely redesigned anti-drive locking system, along with Armor's super composite hardplate, which helps protect the Group II lock and relocker system from a drill attack, and will be available in 20 standard sizes.



Circle 243 on Rapid Reply





## Brown Announces New Line

Brown Safe Manufacturing announces a new line of value packed, front loading, rotary hopper retail security drop safes. Available in several sizes from the economical B2214RHF, 22" x 14" x 14" (shown), to the C3314DDRHF, 33" x 14" x 14" double door model.

Units are available in both "B" and "C" ratings. The door(s) are protected by three, one-inch locking bolts and your choice of combination or key locks.



Circle 244 on Rapid Reply

## Cannon's Model 14R Gun Safe

Cannon Safe, Inc. introduces Model 14R corner gun safe designed to fit any corner offering maximum storage for rifles yet utilizing less floor space than conventional gun safes.

The corner safe offers the traditional black paint, pinstripping, and eagle standard on all other gun safes. 1" chrome round bolts add additional security and enhance the beauty of the safe.



Circle 245 on Rapid Reply

## Conceal-A-Safe's™ Money Drop Slot

Conceal-A-Safe's disappearing money drop slot safes have two steel doors. The first door with the combination lock covers 70 percent of the door opening. The second door covers the back 30 percent of the door opening and is held in place by the first door. The money drop slot is cut into the front half of the second door.

The back half of the second door, or money drop slot door, slides under the safe body. This door can be removed, then turned 180 degrees and replaced. When the door is positioned this way, the money drop slot is covered by the safe body. Reverse the door and the money drop slot is exposed. Consequently at night, weekends or vacations, the money drop slot can be eliminated by the way the door is positioned.

Circle 246 on Rapid Reply

## Detroit Mini's Deposit Safe

Deposit safes from Detroit Mini Safe Co., discourage holdups on delivery trucks at retail stores, theaters, and other businesses that make collections.

All welded steel, construction mini-safes permanently mount to the floor. Sizes available are 4" x 10" and 6" x 10" x 12". Warning signs are also included.



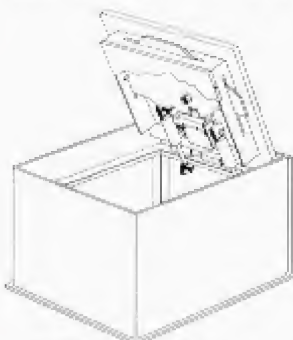
Circle 247 on Rapid Reply

## Eclipse Safe's Rota-Bolt Line

Eclipse Floor Safe's Rota-Bolt is a specially designed floor safe which has a flat rotating bolt plate with one moving component and three-way boltwork.

Features include hardplate protecting the lock, break-away dual shouldered handle, larger door opening, heavy-duty shock for easier opening, drive-resistant door jams, and it's American made.

The Rota-Bolt is offered in four convenient sizes in both the 1/2" and 1" doors.

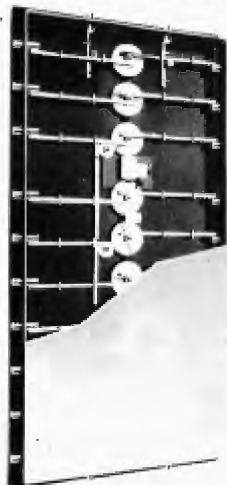


Circle 248 on Rapid Reply

## Fort Knox's Yeager Edition

This Fort Knox vault is constructed with high strength steel, concealed hinges, and extra heavy reinforced door. Fort has added their ceramic fire protection package, using materials capable of withstanding 2400 degrees.

The Yeager Executive Edition also houses a sophisticated locking system up to 32 solid gears.



Circle 249 on Rapid Reply

## Gardall Safe's Electronic Option

Gardall safes are now available with ease and convenience of their new Electronic Lock Option. The six digit swingbolt lock is U.L. Group II rated and is easily retrofitted onto most existing Gardall Safes with combination locks.

The lock has: One million potential combinations; an easy combination change feature; and a lockout delay feature if four incorrect combinations are entered in sequence.



Circle 250 on Rapid Reply

## In-A-Floor's Rocker Box

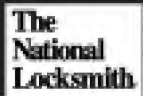
Rocker box depository safes are available from In-A-Floor Safe Company. When the top of the Rocker Box is opened to accept the deposit, the bottom closes. When the top is closed, the bottom opens to drop the deposit into the lower compartment.

It also features a double door, double compartment, combination lock outer door with water resistant dust cover and dual key lock inner door with deposit slot.



Circle 251 on Rapid Reply





Continued from page 34

### Liberty Safe's Presidential Series

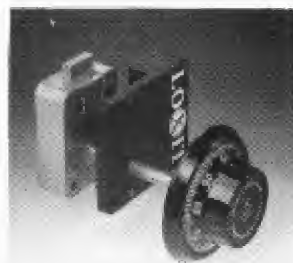
The Presidential Series is specially suited for home security. The body is molded from 1/2" thick steel into a strong seamless exterior. All Presidential safes feature double-wall construction, with the inner wall consisting of UL-listed fireboard. The 1" reinforced door is fully recessed to prevent prying. The gear-drive mechanism is guarded by shear-pin protection and extensive hardplate.



Circle 252 on Rapid Reply

### The COM block By Loxit

The COM block from Loxit Industrial Technologies is a reliable, battery operated, electronically controlled device capable of withstanding more than a million opening and closing operations. In its cast metal housing it fits neatly around the combination lock. The shallow compartment containing the electro-mechanical blocking mechanism fits over the lock shaft, between the lock and the door inner surface, and has the same fixing hole footprint as the lock.

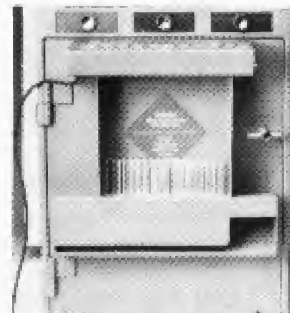


Circle 253 on Rapid Reply

### McGunn's CC 3224 Cash Controller

A new cash-vending drop safe with large capacity and intelligent, variable time delay cash dispensing is now available from the McGunn Safe Company.

Large capacity provides room for extra cash, rolled coin, and other items. Intelligent variable vending means the safe can be programmed to dispense a roll of nickels instantly, and a tube containing \$200 to cash a check or make a lottery payout only after the expiration of a ten minute delay.



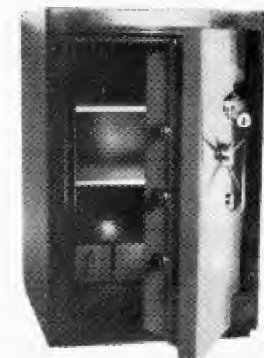
Circle 254 on Rapid Reply

### Metro Safe's Bischoff Line

Metro Safe company reintroduces and distributes the complete line of Bischoff Safes.

The line of Bischoff Safes produced to protect the home, office or business, range from solid steel gun safes, "B" rated composite fire and burglary safes, composite TL-15, TL-30, TRTL15X6, TRTL30X6 to special armored safes.

The safes are available in sizes ranging from 1' to 28' cubic.



Circle 255 on Rapid Reply

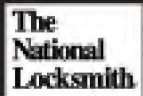
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### Mutual Safes Protector Series

In 1983, Mutual Safe introduced the first single unit to offer both fire and burglary protection at an affordable price: the Dual Protector Series. They are not introducing a feature that will greatly improve the security of this unit.

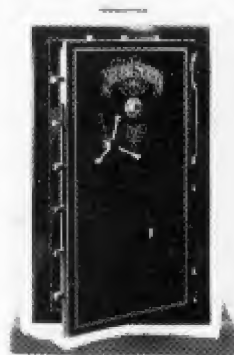
Beginning with September 1991 production, the DP Series will have the same body as the TL 15 safe, allowing the door plate to recess about 1/2" into the body to improve the prying resistance. The locking bolts will fire into individual bolt pockets rather than locking behind a solid bar. This will eliminate the possibility of prying the door inward and breaking the locking bar.

Circle 256 on Rapid Reply

### National Security's Magnum Plus Safe

The Magnum Plus from National Security Safe Co. is 1' taller and 4" wider and deeper than the Magnum S.

The Magnum Plus' standard construction includes triple-wall thermal installation, and 20 locking bolts on the door with eight on each side, two on top and bottom.



Circle 257 on Rapid Reply

### Pryor Company Safe Heads

Pryor Company is now manufacturing 7" and 7-1/2" safe heads in any quantity for replacement of floor safe heads for the do-it-yourself manufacturer. The heads are fully machined and use the LaGard key or combination. Pryor also builds replacements for floor safe heads for Gary models 50 and 60. Star, Major Models C, E, and XB, LaGard and Mosler Model B-711.



Circle 258 on Rapid Reply

### Safe N' Ready Handgun Safe

Made of heavy rolled aluminum, the Multi-Handgun from Safe N' Ready holds up to five handguns and can be fitted with an optional shelf. It comes equipped with two quick access mounting straps.

The Model #105 Port-A-Safe comes with a bracket for mounting under a counter or desk and can also be easily removed with a wing nut for total portability. It is ideal for home, office, boat, or RV.



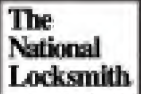
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## S & G's Scrambler Lock

Sargent & Greenleaf introduces The Scrambler, the only lock specifically designed to reduce theft in high cash storage safes.

The Scrambler is a three-wheel combination lock, featuring a uniquely engineered springloaded "hook-like" mechanism to interact with the single-piece, brassforged lever. This mechanism scrambles the wheel gates away from the lever fence the instant the bolt is retracted.

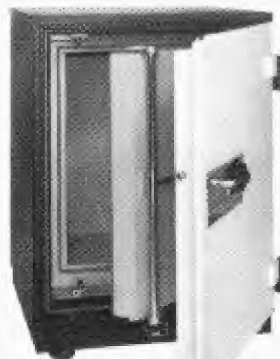


Circle 260 on Rapid Reply

## Media Safes From Schwab

Schwab Corporation's two new media safes provide U.L. classified 125 degree protection for computer media forms. The 1820CTS holds up to 600 3 1/2" diskettes or 12 10 1/2" tapes. The 1830CTS holds up to 1000 3 1/2" diskettes or 24 10 1/2" tapes.

These safes are also covered by Schwab's unique \$100,000 Covered Contents Warranty and our free after-the-fire replacement program.



Circle 261 on Rapid Reply

## Sentry's Model 2000 Fire Safe

Sentry Group introduces a new, affordably priced Fire Safe two drawer file that is produced to store vital business and tax records.

The Model 2000 file, featured in a small size of 27 5/8"x16 5/8"x20-9/16" and a lighter weight of 125 pounds over competitive units, offers spacious storage for hundreds of important documents, tax records, and other valuable possessions.



Circle 262 on Rapid Reply

## Fort Knox Protector Series

These units, now available with concealed hinges, make up the least expensive line of Fort Knox vaults.

The rack and pinion gear drive locking mechanism provides a tight lockup with a Sargent & Greenleaf lock featuring relocker and an optional key locking dial. The fully adjustable ball bearing hinge and 5/8" locking bolts provide high security against even the most sophisticated burglars.



Circle 263 on Rapid Reply

## Gardall's New Gun Safe

Gardall Safe Corporation has introduced a new Gun Safe to its line of security products. The GS6022 which measures 61" x 21" x 13", weighs 280 lbs. and comes with 3 optional interiors (9 gun, 15 gun and 4 shelf).

The safe also has all the normal Gardall security features of hard plate, relocker, locking bar, and 4 live bolts with 1 1/4" throw.



Circle 264 on Rapid Reply

## In-A-Floor's Home/Office Safes

Burglary resistant safes are designed for business or home use available from In-A-Floor Safe Company. Flush in-floor installation in a concrete slab floor or a raised wood foundation provides fire and theft protection. A water resistant dust cover fits over the top of the safe for easy concealment under a carpet or rubber mat. Three different ratings are available: "B," "C-B," and "C." Outer and inner doors are also available.



Circle 265 on Rapid Reply

## Liberty Safe's Patriot 45™

The Patriot 45™ in-wall handgun safe from Liberty Safe and Security offers rapid gun retrieval in 3 seconds. The system is activated and you have access to your weapon (2,200 different combinations). The safe is unaccessible to children and any unauthorized users so you sleep easier at night. Installation is easy. You can do it in less than an hour.

Features include a quick access high-security lock and pry-resistant door.

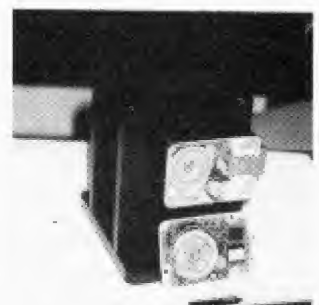


Circle 266 on Rapid Reply

## Mas-Hamilton's X0-7 Combination Lock

Premiered at the July ALOA show was Mas-Hamilton's X0-7. This lock retrofits a 6730. The new lock is completely computerized, featuring new technology which eliminates wheels and the possibility of manipulation. The X0-7 is electronic. However, no batteries or wiring is needed since the lock generates its own electricity as the wheel is spun.

Each lock may be used in single combination mode, senior/subordinate mode, or in dual combination mode.



Circle 267 on Rapid Reply



## BMW Service, Part I

"Many locksmiths are intimidated by BMW and are reluctant to attempt any type of service other than duplicating a key."



Send your lock and key questions to Jack Roberts, The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107.

by Jack Roberts

The past decade has seen an increased acceptance in the United States of imported automobiles from both the Far East and from European countries.

The BMW from the Bavarian Motor Works was one of the earlier European imports and its popularity has grown steadily with American owners to the extent that BMW clubs, (see photograph 1) exist throughout the



1. A BMW club.

country with newsletters and the national club publishing a monthly magazine, the Rondal.

While admittedly the BMW is not encountered every single day by every locksmith, it is apparent that just as

many locksmiths are intimidated by the BMW and are reluctant to attempt service of any kind other than duplicating a key. Our experience shows that there are shops who do not even stock a minimum of BMW key blanks. As evidence of this, we regularly receive locks from BMW owners all over the country because the local locksmith would not attempt service of any kind.

We recently received a phone call from an owner who had moved from Boston to a less urbanized area of the country and was having trouble with the passenger door lock. Two locksmiths in the area refused to do more than try the old WD40 solution on this 1972

*Continued on page 42*

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Bavaria which had no effect on the operation of the lock. It could be that the locksmiths encountered by this owner were reluctant to service the lock due to the "dimple" key used. If the correct key is available there should be no problem with servicing the lock because it is a pin tumbler mechanism, although great care must be taken in disassembly.

Since many of these BMW owners are very adept at performing much of their own mechanical work and know by loving touch every nut and bolt on their automobiles, we advised the owner to remove the lock and ship it, along with a spare key, to us for service. He did and we did and another \$35.00 went in the till to help make the mortgage payment. In the event that an extra key had not been available we would have created one by code.

The main point here is that we have been doing a lot of work that could just as easily have been done by one of you readers if you just learn how to do it yourself. In this article we will try to help you learn! Let's start with key blanks and model numbers.

First you must understand that German engineers are an ingenious

bunch and that changes can occur in any model year if they will further enhance the automobile. Also, the only thing that you can count on as being consistent is the inconsistency with which they do things. It seems that the rule is: "If it will make it better, change it." Second, all dates given are approximate to the very best of our research.

The earliest BMW's imported into this country were the 1602 and the 2002. These cars were produced from 1968 until 1976 and there are still a lot of them on the roads today. Don't be intimidated by the model numbers on BMW's. The 160 of 1602 means that the engine has 1600 cc displacement. The 2 means that it is a two door. The 200 of the 2002 means that the engine has 2000 cc displacement and also the 2 means two door. There are other model numbers in the 1600 and 2000 series but the locks are all essentially the same. You may also see an 1800 series which is a four door version, and you may see various letters such as CS (Coupe Sport).

A two key disk tumbler system is found on all of these models with one key operating the doors and ignition and the other key the trunk and glove box. (See photograph 2.) The door-ignition locks are double bitted with

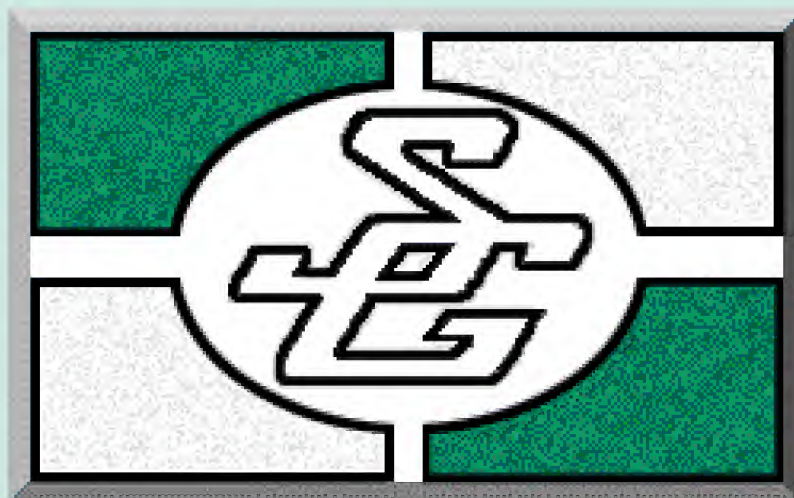


**2. The two key BMW system: door/ignition and trunk/glove box.**

eight disks (four on each side of the plug), and the key is a non-reversible Silca BW6 (Taylor B80NR). Codes are in the "W" series from 1001 to 2020 and 7001 to 8000 and will be found on the door locks and, if it is still there, on a piece of paper stuck to the ignition bolt housing.

The quickest method of obtaining this code is to remove the lower shroud from the steering column and look. If you are lucky the paper will still be there. If the paper is gone the next step is to remove the door lock and get the code from the lock body. Before you do

*Continued on page 44*



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Continued from page 42

this, however, find out if the owner has been using two keys, one for the door and one for the ignition. There is no need to pull the door lock if you are going to have to pull the ignition also, unless the owner wants the doors and ignition keyed alike. This is what we suggest and usually do.

Many times these cars are being restored and the owner wants to preserve the original system if possible. Removing the door panel is straightforward except for the round turn knob which controls the wing window. (See photograph 3.) You will have to fashion a hook from stiff wire and fish behind the knob for the center trim access hole. You will be able to feel the end of the

hook slide into the hole, when it does, pull and the center trim will pop out exposing the screw which holds the knob in place.

The door pull has three holding screws, one at the forward end under the chrome trim (this just slides back) and two at the lower end. The inside door latch handle screws are also covered with chrome trim. Remove this by popping it out from the wide end. From here on, the panel is held in place with wire clips but use care in popping them out. These cars are old and the clips could be rusted in place, and you sure don't want to damage the panel.

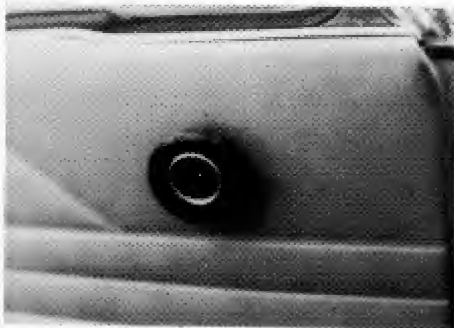
With the clips removed the panel lifts up and out of the window channel. The exterior handle, (see photograph 4), is held in place by a screw at the

front of the handle which is now accessible from inside the door and a screw at the rear of the handle which is visible on the outer edge of the door. The code will be stamped on the lock body or maybe on the cam. For service of the lock remove the cam retaining screw and the return spring and slide the plug out of the handle. If you are acquainted with VW's you will recognize an immediate familiarity.

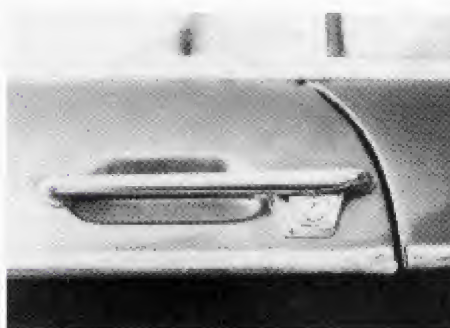
Due to the age and the possibility that the ignition has been changed there is a chance that the door code will not match the ignition. As previously mentioned, ask and you may find out in advance that the ignition will have to be removed. With the shroud removed you will see a retainer pin towards the front of the bolt housing. Drill next to the pin and pry it out with an awl or other sharp pointed instrument. The cylinder will now pull out of the housing. The cam on this lock is staked in place and great care must be used in removing it.

With the cam removed the plug will slide out of the cylinder body for service. If you should happen to break one of the ears on the cam it can probably still be used since it isn't

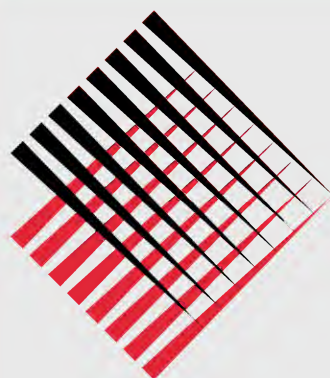
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3. Round turn knob for wing window control.



4. Exterior door handle.



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Continued from page 44

going anywhere after the plug is replaced in the cylinder. Here, also, you may notice a strange similarity to other European automobile ignition locks from this era.

Trunk locks for the 1602-2002 models will use the Silca BW4 (Taylor B77U) for the B 101-630 codes. (See photograph 5.)



5. A BMW ignition and its proper key.

The Silca HU9 (Taylor R63Y) is used for the SX 1-240 codes. The SX codes are almost always stamped on the lock housing (See photograph 6), and the B codes can be found on the housing and sometimes on the cam.



6. Six codes stamped on the lock housing.



7. B codes stamped on cam. Note retainer ring.

(See photograph 7.)

Trunk locks are secured from the inside by a bezel nut which is easily removed. Clean these locks thoroughly since the grease which is put in them when they were new is now thick and dirty and will cause very sluggish disk action. These are push to open type locks and are disassembled by removing a Waldes-type retainer ring from the rear of the housing. This retainer can be seen in photograph seven. Do this with care as there is a strong spring underneath the thrust washer and the retainer ring can make a deep impression in your forehead if it gets away from you.

It is not necessary to remove the cam from the end of the plug as the entire assembly slides out of the housing now that the retainer has been removed. There are no surprises, just slide it right out. (See photograph 8.) If it is necessary to remove the cam, perhaps to replace a broken return spring, file a bit of material off the cam retainer at the point shown by the arrow in photograph seven and pry the cam off with the tip of a screwdriver. Do this very carefully! The retainer is a part of the casting and can break off easily. Just

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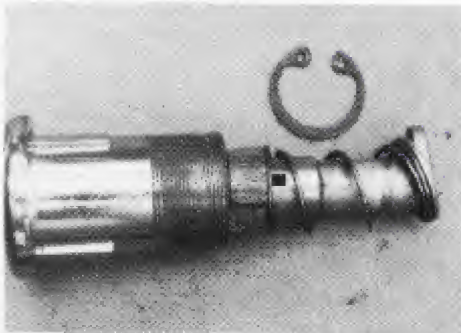
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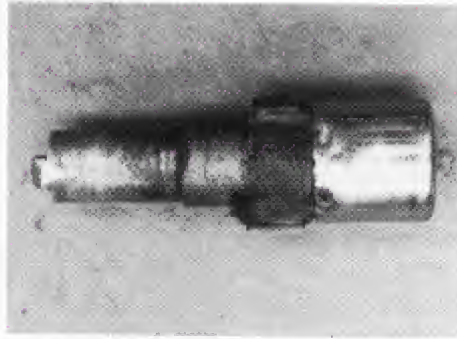


8. Entire assembly removed from housing.

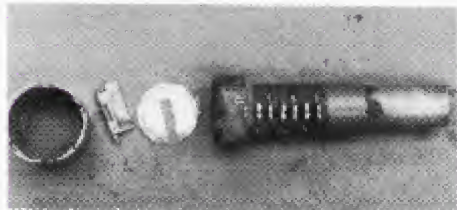
file enough to allow the cam to move.

When replacing the cam, stake the retainer in place. The chrome cover surrounds most of the disks on these trunk locks and must be removed for complete access to the disks. This must be done very gently since you will have a difficult time replacing it.

You will find two dimple stakes laterally opposed from each other at the front of the cover. (See photograph 9.) Drill these stakes out, very carefully and very shallow and then work the cover off the plug which gives access to the wafer disks. (See photograph 10.) With a fine file dress the area of the cover where you have drilled. This cover is a tight fit and any burrs will make it difficult to replace.



9. Opposing dimple stakes.



10. Plug cover removed allowing wafer disk access.

After servicing the disks replace the cover but turn it slightly from its original position and restake at the proper points. Again, dress the outer edge of the cover so that it will move smoothly in the housing. When the lock is installed your drilled holes will not be visible.

The next model BMW imported into the US was the Bavaria. This car is essentially the same as the 1602-2002

with some major improvements. Manufactured from 1970 until 1975 this car featured one of the first high security type locks and keys for automobiles utilizing a master and valet key.

As mentioned earlier the Bavaria locks are double bitted pin tumbler and the reversible keys, Silca PB1 and PB1P, Errebi PE1 and PE1P, Borkey 1000 and 1000P, are drilled instead of cut. All of the locks are coded with the code stamped into the lock cylinder except that the trunk lock code will be found on the thrust washer. If the code is not visible, remove the thrust washer as described above and it will be on the reverse side.

The design of the Bavaria master-valet system is that the master key has more bittings than the valet key and the trunk lock has more bitting (pins) than the door and ignition locks. A valet key can be made into a master key by adding the additional cuts. But, a milling type key duplicating machine is needed for cutting these keys. An emergency master key can be made from a Valet with a bench or hand drill.

Ignition lock removal was made somewhat easier on the Bavaria by

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some minor engineering changes. Look for a crater-like depression on the cylinder near the bolt housing. Drill in the center of this depression until the point of the drill breaks through the skin of the housing. Use very light pressure on the drill. This could be likened to breaking through the casting on a GM housing to locate the retainer. With the hole drilled, insert a stiff wire or probe and push on the spring-loaded retainer while pulling on the front of the cylinder. The lock will slide out of the bolt housing for service. The two rows of pins are secured by pin covers similar to those found on conventional mortise or rim cylinders. Remove these very carefully! The plug is retained by a pin located under the pin cover in one of the rows.

Service these locks the same as any pin tumbler locks. The door panel and the exterior door lock handle can be removed in the same manner as described for the 1602-2002 although there may be some minor changes in the way the panel and hardware are secured. Work lightly to avoid damage to the panel.

To make a master key from a valet key, lay the key flat on the workbench with the tip pointing away from you and not the cuts (holes) on the blade. There will be three on each side of the center line. On the left side there will be cut, cut, cut. On the right side there will be cut, space, cut, cut. Or, space, cut, cut, cut. There are four depths: #1 is very shallow and has a very small diameter; #2 is slightly deeper and wider as are #'s 3 and 4.

Study the cuts to get an idea of what a #2 looks like. Locate the space on the right side which will be in either the first or second position, center punch this location and drill a #2 cut. Do this slowly much the same as filing a cut when impressioning. Cut and try the key until the trunk lock opens. This master cut will always be a #2 and it will always be in the first or second position on the right side of the blade.

Codes for the Bavaria are from 0001 to 1100 with prefixes such as CA, CB, HJ, ID and others.

We have found no actual relationship between the prefixes and the numbers. Just drop the prefix and use the number shown. Next month we will look at the BMW models from 1975 to the current production.

Guide keys are available from Hawk Products, 128 E. Washington, #72, El Cajon, CA 92019. §



# Keep Those Drills Sharp!

"By understanding a few of the basic principles of the drill bit, you will be easily able to sharpen and maintain the cutting edge."

**by Robert Sieveking**  
The locksmith, like most tradesmen, is called on to drill a wide variety of different materials, on a regular basis. When installing a lockset in a metal or wood door, the door must be drilled to accept the lockset. If a lock malfunctions, and cannot be picked or opened with a key, it must be drilled. A safe that has been vandalized will need a few holes drilled in its case to allow the locksmith to neutralize relockers or force back the bolts.

How many examples can we all think of, supporting the need for holes in almost any material? I read somewhere that 80% of the metal that is removed in the world, is cut by the common twist drill. Yet, common as the twist drill is, very few people have even a basic understanding of the complex geometry of the cutting edge.

By understanding a few of the basic principles of the twist drill, you will be able to easily sharpen and maintain the cutting edge. Drills, after all, are tools. Re-sharpening them, as a regular maintenance procedure, will greatly prolong their useable life, and increase the profitability of your investment. Understanding the proper geometry of the cutting edges will allow you to easily and quickly sharpen most common bits. A properly sharpened drill will cut faster, with less pressure, and leave a cleaner hole than a drill that

is dull or improperly sharpened.

If getting more holes per drill bit, or drilling holes faster and with less pressure is important to you, then you will find some information in this article that will be of real interest.

What common terminology describes the various parts of a drill bit? How do the angles of the cutting edges effect the performance of the drill? Where does a drill bit get dull, or wear most? What special equipment do I need to sharpen drill bits? Who manufactures drill sharpening machines?

Before we can intelligently discuss the maintenance of the cutting edge, we need a common terminology for the various parts of a drill. Illustration one shows a common metal cutting twist drill. The drill is divided into two parts, the body and the shank. The body of the drill is the fluted portion that does the actual drilling. The shank of the drill is designed to be clamped in a drilling machine. The shank can be straight or tapered, the same diameter as the drill bit, or it can be reduced in size to fit into a standard 1/4" or 1/2" drill chuck. There are many different configurations for the drill shank.

There are two flutes in the body of the drill bit. They are designed to carry the chips from the bottom of the hole (tip of the drill) to the surface. The drill shown is a right hand drill. Right

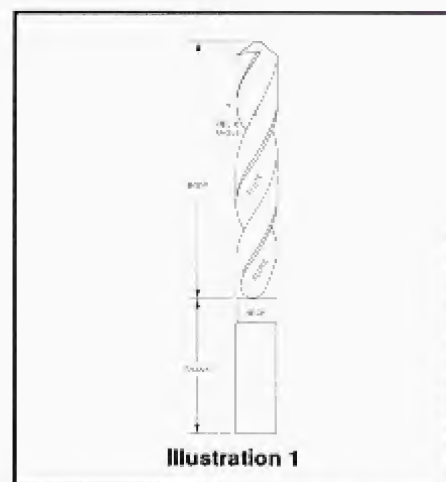


Illustration 1

rotation of the body will cause the chip to be ejected from the hole. Left hand twist drills will have the spiral in the reverse direction, for left hand operation.

The helix angle of the drill is determined by the material being drilled, the depth of the hole, and the type of chip the material and cutting edge is producing. As a rule, soft materials like copper, brass, and plastic will produce a long chip, making a slow twist or low helix bit more desirable. Most machineable steels will make a curly chip, which will not always follow up the flute. A standard helix bit, like the one shown in illustration one is the best choice for general purpose drilling. Cast iron and hardened steels

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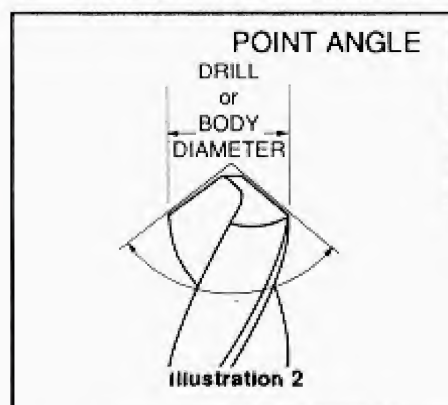
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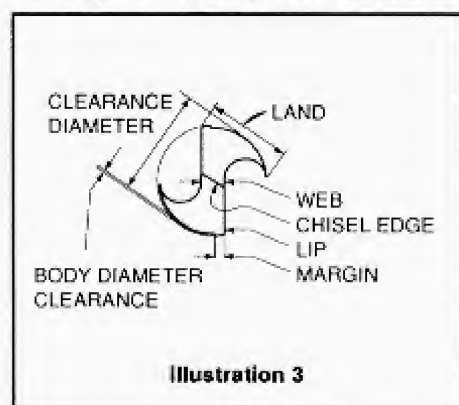
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flake or powder, causing "packing" problem at the tip of the bit. A higher helix angle will eject the chips more efficiently in this material. Concrete drills, most commonly carbide tipped, have a very high helix angle, to eject the very fine chip or dust. Standard helix drills are the best choice for 99 percent of the materials a locksmith encounters.

Illustration two shows the tip of a drill bit. You can see that the drill diameter or body diameter is measured across the margins of the bit. The point angle is usually given as the included angle of the tip. Though there are any number of angles that a drill can be ground to, there are only two common point angles that are more or less standard; they are 118 degrees and 135 degrees. The 118 degree point, shown in illustration two is a general purpose point. A flatter point, with a 135 degree point angle would be more appropriate for alloy steels. The armor plate found in TL rated safe doors and bodies is an alloy plate steel. A properly sharpened 1/2" high speed drill bit will penetrate a 1" steel safe wall in about two minutes.



In illustration three we see an end view of the drill, from the point. As we look at the point of the drill, we can see the two cutting edges. The "lips" of the drill point do all the cutting. The "land," sometimes called the "surface of the point," is that portion of the drill



behind the lip. When a drill is sharpened, this is the surface that is ground away.

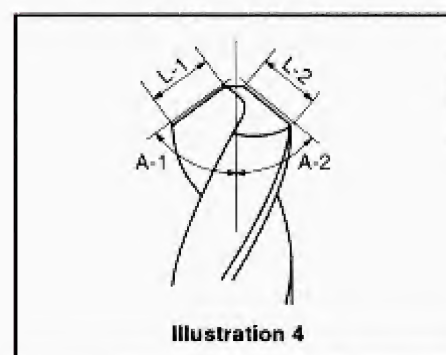
A "margin" creates a clearance for the drill. The "margin diameter," or "body diameter," is measured at the outside of the margins. The body diameter is reduced behind the margin, to create a clearance. The "clearance diameter" is made slightly less than the "body diameter," to allow the drill to cut more freely.

A "chisel edge" is formed by the two lands as they meet at the center of the drill. The chisel edge does not cut, but moves the material being drilled away from the center, to be removed by the cutting lip and carried away by the flutes of the drill.

The "web" is the material at the center of the drill that gives the bit its strength. Most modern drill bits will have a web that increases in thickness toward the shank of the bit. This adds to the strength of the drill.

That pretty much describes the important parts of the drill and drill point, but in order for a drill to perform properly, it must be sharpened properly. There are three major points that must be carefully watched as you begin sharpening drill bits. They are; the point angle, the lip length, and the relief angle.

Illustration four shows a common two flute drill point. You will notice that the point angle is being measured from the center line of the drill body. Though a point angle for a drill is given as the "included angle" of the tip, the angle is measured from the center of the drill bit. The angle which the lips make to the center of the drill bit, labeled "A-1" and "A-2" in the illustration, must be equal for the bit to operate properly. If the lip angles are not equal, the bit will cut chips of unequal thickness, causing the bit to distort as it enters the material being drilled. The bit will cut an oversized hole, that is not straight and true. The hole will take the form of a "helix" or corkscrew. If you are drilling the hole to accept a shaft, you will find



that the hole measures oversize, but will not accept the straight shaft.

The lip lengths, labeled L-1 and L-2 in illustration four are the second major point that must be watched. For the drill to make a round true hole of the correct size, the lip lengths must be kept exactly equal. If one lip is longer than the other, the bit will cut on only the longer lip. The opposite lip will not make chips. The hole will be oversized and not round. The loading of the bit, caused by the cutting of the material, will be off center, causing the drill point to wobble in the hole.

The relief angle of the drill point is where most beginners drop the ball.

The common relief angle for most drilling applications will be between 8 degrees and 12 degrees. If the relief angle is 0 or less, the bit *will not cut*. If the relief is too much, the point will take too much material, causing the chips to be too thick.

Over stressing the bit may cause it to shatter in the hole. As you remove material behind the lip, to relieve the cutting edge, the lip becomes more and more fragile. This can cause the corners of the bit to shatter. The land behind the lip gives support to the cutting edge, buttressing it against the force of the chip, as it is parted or ripped from the material being drilled. A second benefit of the material behind the cutting edge is that it carries heat away from the cutting edge. If we relieve the cutting edge too much, the heat generated by the chip separating from the material being drilled, will melt the point of our bit.

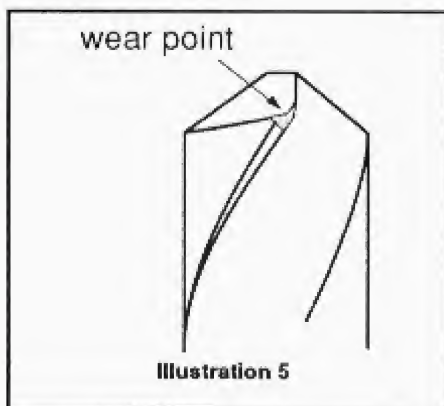
As you can see, the many angles of the drill point work together to allow the bit to efficiently remove material. The material being drilled, will sometimes need a bit of special design. If you are drilling manganese steel, as in the all famous "cannon ball" safes, try a 135 degree point angle with a 6 to 9 degree relief. Use straight (not 2%) "milk" as a cutting fluid. Keep your bits "sharp" and don't let the drill "idle" (rotate without cutting) in the hole. Most people have a special problem with manganese steel, because they don't pay attention to the little details.

When you inspect a bit, you will find that the bit will wear most at the corners. Illustration five shows the point of most wear. As the corners of the bit break down, the wear will begin to extend up the margin and across the lip. Heat generated by the dull corners of the bit will increase as the drill

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breaks down, until the cutting edge will no longer remove a chip and the point of the bit melts. By sharpening the bit as soon as it begins to show signs of breaking down, you will be able to restore the cutting edge without removing a great deal of material. This will save the drill.

The second advantage to restoring the cutting edge before it breaks down in the hole is that, when drilling armor plate and exotic metals, the heat generated by the drill point will not "work harden" the material being drilled. The primary advantage to the safe maker or armor plate steels is that



6. The combination hook scale/drill gauge (left), and gauge for 118 and 135 degree points (right).

they will harden where you are drilling, because of the heat generated by the drill point. A sharp drill generates less heat in the hole. Again, don't let your drill "idle" in the hole.

There is no special equipment required to sharpen drill points. A drill

gauge and a good bench grinder will allow you to effectively sharpen most drills. Photograph six shows two drill gauges. The combination hook scale/drill gauge, on the left, will make grinding the drill point angle relatively easy. This drill gauge is for 118 degree drill points only. The drill gauge at the right has a gauge for 118 degree and 135 degree points. The drill bit can be held against the edge of the tool and the point angle compared to the scale, allowing the locksmith to accurately gauge the point angle as the bit is being sharpened.

If you think studying the angles and faces of the drill point is too complicated, you might consider purchasing a drill sharpening machine. Two that I can recommend are the "Darex" and the "Lisle" machines. Either machine will allow you to accurately sharpen drill bits quickly and correctly with very little training. They are as easy to use as any key machine.

Drill sharpening can also make a profitable add on business, which you can offer to your customers.

For more information contact: Lisle Corp., P.O. Box 89, Clarinda, IA 51632, (515) 246-1800. Darex Corp., P.O. Box 277, Ashland, OR 97520, (503) 488-2224. \$



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## The National Locksmith Photo Contest

Well, finally have the results of our first annual Locksmith Photo Contest! In this issue we are printing the big winners. However, in upcoming editions we will print lots more photos as Honorable Mentions. Thanks go out to those of you who submitted pictures. If yours are not here, perhaps they will appear in one of the next issues.

Congratulations to the winners! And of course, many thanks to All-Lock who has donated the following prizes: \$100 in product, \$75 in product and \$50 in product to the first three winners in each category. The categories are Locksmith Vehicles and Locksmith Shops. Again, congratulations to the winners. The rest of you...stay tuned!



First Prize, Locksmith Vehicle, Paul's Lock & Safe, Freehold, NJ. A 1979 Ford, formerly an ambulance. Notice convenient storage.



Second Prize, Locksmith Vehicle, Allen Hardin, Grandbury, TX. A Chevrolet step van with nice signage, and well set up inside.



Third Prize, Locksmith Vehicle, J. Stein Locksmith, Jamaica, NY.



Hon. Mention, smallest vehicle, Me-Shy Locksmith, Bolivar, MO.



# The Lighter Side

Murphy and Friends



by Sara Probasco

"I've often suspected that Murphy was a locksmith. Surely no other profession could have so aptly inspired his oft-quoted Law, 'If anything can go wrong, it will.'"

Murphy and his friends are credited with a number of other laws, perhaps not so well known, the substance of which tend to verify my opinion. For example, here are some you may have heard:

Left to themselves, all things go from bad to worse.

Just when you think things can't get worse, they will.

Nothing is ever as simple as it seems.

If everything seems to be going well, you have obviously overlooked something.

Axioms exist for practically every phase of our business. They've been "making the rounds" for years, their originators long forgotten, in most instances. With my thanks to the original authors for passing along their wit and wisdom, I bring you a few herewith:

**Regarding Service Calls.** The Rule of Time: Everything takes longer than you think it will.

Law of the Gizmos: 1) Other people's tools only work for them. 2) The fancier the gizmo, the less apt it is to work. 3) If nobody uses it, there's a reason.

Law of Errors: The best way to call attention to a mistake is to try to cover it up.

Principal of Vehicle Inertia: An old service van that runs perfectly will continue to run perfectly until you put new tires on it and then it will fall apart.

Service Department's Theorem: If an experiment works, you are obviously using the wrong equipment.

Rule of Getting Home for Dinner: When working on a problem, it helps if you know the answer.

Axiom of the Smart Aleck: If a great

deal of time has been spent unsuccessfully seeking the solution to a problem, the answer will be immediately obvious to the first unqualified person who comes along.

Law of Awe: Three correct guesses in a row, and you're an expert.

**In The Work Place:** Bruno's Law of Assembly: If it don't fit, don't force it. Get a hammer. If it still don't go, get a bigger hammer.

John's Law of Disassembly: Anything hit with a big enough hammer will eventually come apart.

Law of Force: If it jams, force it. If it breaks, it needed replacing anyway.

Good Neighbor Law: If it can be borrowed and it can be broken, someone will borrow it and break it.

Law of Warranty: If it can break, it will, but only after the warranty expires.

Maxim of the Steel Ball: It is impossible to make anything foolproof, because fools are so ingenious.

Anti-Gremlin Law: The easiest way to find a lost tool is to buy a replacement.

Law of Selective Gravity: Any object will fall so as to do the greatest possible damage.

Law of Limited Reach: A falling body always rolls to the most inaccessible spot—right after hitting your toe.

First Law of Car Openings: Any tool dropped while opening an automobile will roll under the vehicle to its exact geographic center.

**Working on Safes:** Installer's Law of Inertia: Some things shouldn't be moved.

Laws of Safe-moving Dynamics: 1) Any large object in motion will always be headed in the wrong direction. 2) A large object at rest will always be facing the wrong direction. 3) The energy required to change either of these states will always be more than you wish to expend, but never so much as to make the task totally impossible.

**Regarding General Business Practices:** Parkinson's Laws: 1) Work expands to fill the time allowed. 2) Expenditures rise to meet income.

First Law of Packrattery: Junk expands to fill the space allowed.

Law of Expert Advice: Never ask the barber if you need a haircut.

Last Rule of Purchasing: Never decide to buy while listening to the salesman's pitch.

Law of Supplier's Demands: A necessary item only goes on sale after you have purchase it at the regular price.

Principle of Packrattery: Anything that you have saved for years will be needed only when it has been disposed of. Then it will become essential that it be produced within three working days.

Small-Businessman's Theorem: 1) You can't win. 2) You can't break even. 3) You can't quit.

Law of Entrepreneurial Economics: After an increase in your prices, you will have less money at the end of each month than you had before.

Third Law of Competitive Inertia: Given enough time, what you put off doing today will eventually get done by your competition.

Corollary of Commerce: If you're coasting, you're going downhill.

Last Law of Management: If you're in a hole, stop digging.

Cryer's Credo: The degree of any failure is in direct proportion to both the effort expended and to the need for success.

Moneybag's Maxim: Anything worth doing is worth doing for money.

First Truth of Business: The easiest way to make money is to stop losing it.

Sutton's Law: Go where the money is. (Someone once asked a bank robber, by the name of Willie Sutton, why he robbed banks. He replied, "Because, that's where the money is.")

**Regarding Customer Relations:** First Law of Complaints: Nobody notices when things go right.

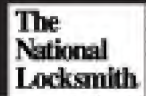
Benchworker's Beatitude: Blessed is he who expects no gratitude, for he shall not be disappointed.

The Rule of Three: Trouble always strikes in threes. A fourth disaster marks the beginning of a new series.

Col. Bullcorn's First Law: When you're up to your nose in it, keep your

*Continued on page 91*





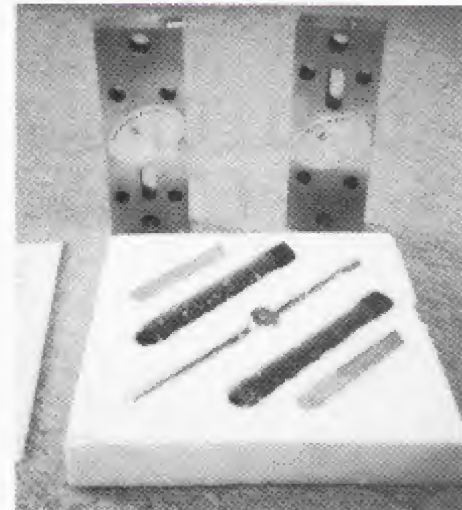
## The Safe Monkey Wrench

A new tool being manufactured for the locksmith is called the Safe Monkey Wrench. It was invented by Jim Ripley for the use only of bona fide locksmiths and safe technicians. The device has successfully opened Mosler and Gary TL-15 safes that were locked up due to malfunction or burglary damage, according to the manufacturer.

Currently, a variety of attachments are in development to expand the use of the tool to include many more square door safes as well as many floor safes.

To open a Mosler TL-15, for example, you first remove the hinge screws. Directions then explain how to remove the hinge retaining cap screws in order to remove the hinges. With the pull screw and foot threaded into the proper end of the wrench tool, secure it to the top of the safe. The second half of the tool is secured to the bottom half of the door, the same way as above.

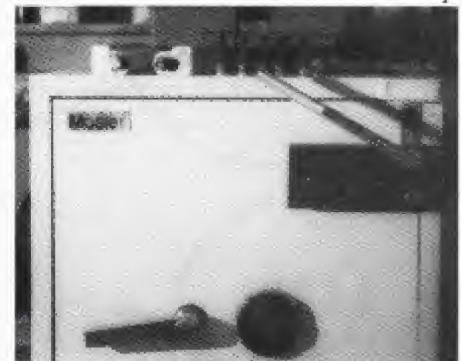
Then simply begin to apply pressure with the pull screws, alternating from the top to the bottom of the safe. As you



The Safe Monkey Wrench kit.

continue to apply pressure, the door brackets will fail, and the door will disconnect.

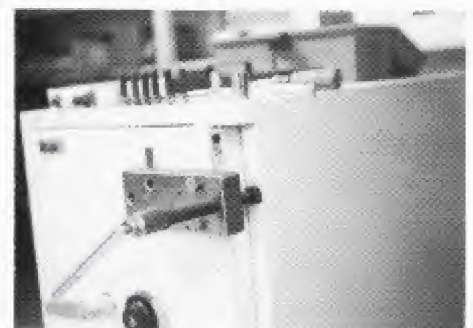
You will need proper blocking and/or safe moving equipment because the door is heavy. At this point you can grind off the old weld, reweld the brackets and do minor touch up



The tool is attached to the safe.

painting. After resolving the problem, such as resetting the combination, reinstall the door on the safe. A typical safe opening with the Safe Monkey Wrench as described here should take no longer than fifteen minutes or so.

A Gary TL-15 is opened in the same manner, quickly and efficiently. Repairs are easily made to the safe.



The door is disconnected.

For more information contact: Jim Ripley Services, Inc., 304 S. Lynn Riggs Blvd., Claremore, OK 74017, (918) 341-1077. §



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## Key Control Mini Section

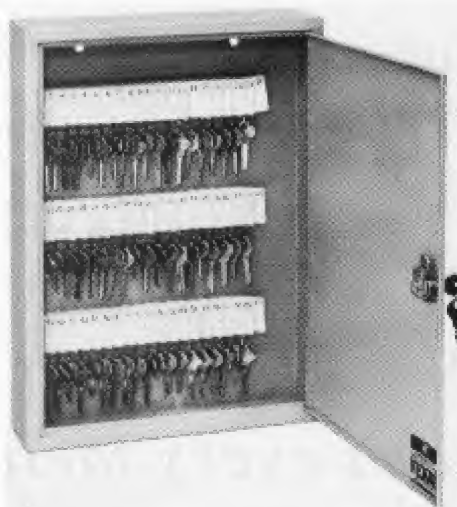
In this section you will meet up with a few of the companies offering key control systems to the locksmith. Read on for more details.

### HPC, Inc.

HPC, Inc. offers a wide variety of key control systems, everything from standard cabinets to key control software.

HPC's key cabinets (Kekabs) are available in either single-tag or two-tag security control systems. HPC's single-tag key systems are designed to accommodate most any number of keys. Cabinet sizes range in capacity from 8 to 730 keys. HPC's two-tag security control systems range in size from 30 to 500.

In recent months, HPC has come out with several new key control products. The HF-40 is a hanging file designed to fit in the drawer of a filing cabinet. The DF-60 is a drawer file designed to fit into most desk drawers and has a capacity of 60 keys.



Two other new HPC key control products are the KEKAB-H48 Horizontal

Key Cabinet and the KEKAB-V50 Vertical Key Cabinet. Both of these new Kekabs are designed to fit into hard to fit and uniquely shaped places. The Horizontal Key Cabinet's measurements are 29-5/8"H x 7"W x 1-1/2"D. The Vertical Key Cabinet's measurements are 7"H x 29-5/8"W x 1-1/2"D.

Another alternative for key control is QuickKab™, HPC's key control software. QuickKab™ is a powerful, computerized key/door control system providing comprehensive key control for large and complex key systems. It will cross-reference master key systems up to the great-great-grand master level. Using QuickKab™ will give the security manager full key and lock accountability with reports and procedures designed to provide a full audit trail, from key ordering to current key status.

HPC provides many different key control options, for whatever your key control needs may be. HPC has been manufacturing key cabinets for 35 years and continues to make improvements on existing key cabinets, as well as, develop new key control systems.

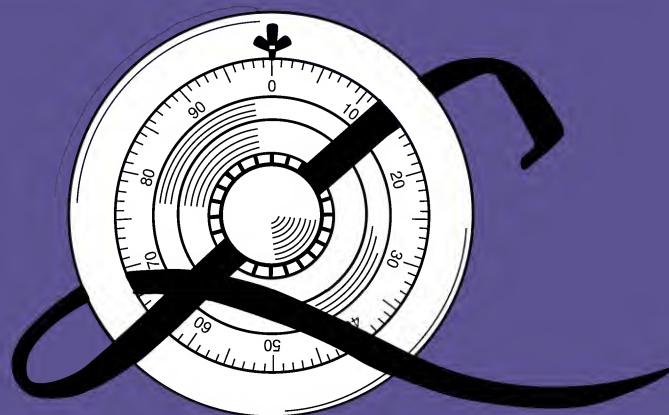
Circle 303 on Rapid Reply

### Lund Equipment Co., Inc.

Lund Key Control Systems are used to stop key loss and improve security in hotels, offices, factories, apartment buildings, hospitals, schools, universities, government and municipal applications. Capacities range from 30 to 700 key hooks in wall cabinets. Floor models are available in capacities to 2280 key hooks. Four-drawer file cabinets have up to 3400 key hooks.

Panel hooks and key tags are numbered consecutively from No. 1 up. Numbered tags are furnished. Tags may be octagonal or oval shape. Colored plastic costs extra. A key receipt card is supplied for each key hook. A book index is used to record file key numbers three ways. 1) Numerically by hook number; 2) alphabetically according to location; or 3) by key change number, numerically according to manufacturer's lock numbers. Collection envelopes are

Continued on page 87



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Continued from page 58

## The National Locksmith Photo Contest



First Prize, Locksmith Shop, John's Lock & Safe, Ft. Smith, AZ. We were impressed with the combination of decor and merchandising.



Second Prize, Locksmith Shop, Toledo Locksmith Co., Paterson, NJ. The counter is 45' long with 21 key machines visible. Wow!



Third Prize, Locksmith Shop, The Lock Shop, Palm Desert, CA. There is a large work area, key board, and safe display area.



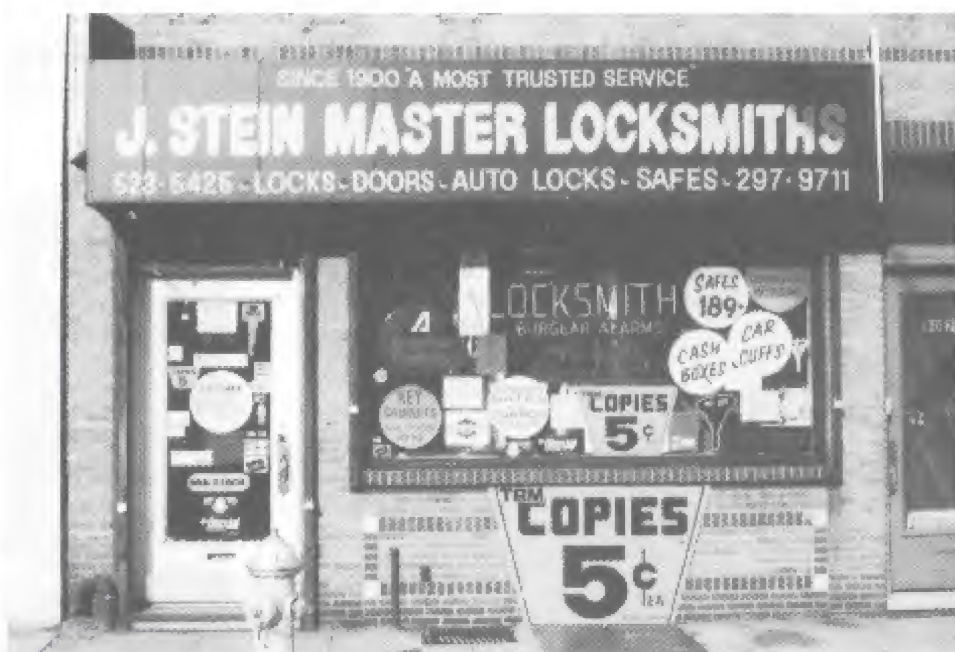
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Honorable Mention, J. Stein, Jamaica, NY. Outdoor view of shop.



Honorable Mention, Locksmith Vehicle, Scotty's Locksmith Service, Spring Lake, NC.



Honorable Mention, Locksmith Vehicle, Mike's Lock Service, Washingtonville, NY.



Continued from page 76

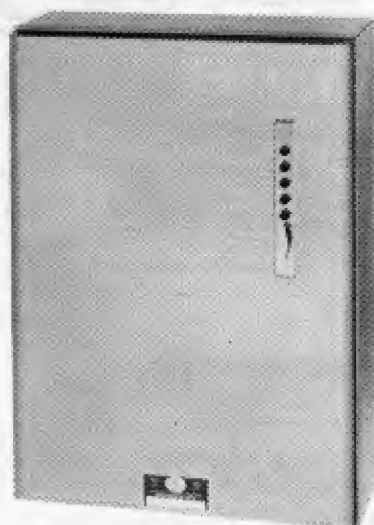
used for collecting and identifying keys as to lock location. One envelope is used for the keys to each lock. An illustrated instruction manual makes it easy to set up a complete system.

Lund Key Cabinets are made of all-welded heavy gauge metal furniture steel (18 gauge). The hinged panels are 20 gauge steel, with hooks front and back. The cabinet is painted with gray enamel and is equipped with a lock and two keys. Cabinets with longer hooks are available for key blank storage.

Circle 304 on Rapid Reply

### Telkee, Inc.

Telkee, Inc., of Glen Riddle, PA manufactures a high security key cabinet with a Simplex pushbutton combination lock which eliminates the problem of misplaced cabinet keys. It is available with Regent wall key cabinets with key capacities of 25 to 125 keys. By using any or all five pushbuttons individually or together in preset order, a user has a choice of 2,200 different combinations. No special tools are required to change the combination.



In addition to high security key cabinets, Telkee offers more than 100 different key control systems, including key cabinets for big head and motel-type keys, Telcore cabinets for holding removable lock cores, and 10-gauge steel Bulldog key safes. Also in the Telkee line are key cabinets for teachers keyrings, moteline key cabinets, portable key cabinets, desk trays, plus six and eight drawer key files.

Circle 305 on Rapid Reply

### Yale Security Inc.

No locking system is any better than its Key Control.

A key control system is defined as a simple, efficient, and systematic method for filing and controlling keys. A system

consists of a cabinet for storing keys and a record system for information about the keys and to whom the keys have been issued.

A system can gain longevity through the use of high security cylinders. These cylinders offer the convenience of having a master keyed high security cylinder tied onto a total key system, and the added security of a high security key system which is separate from a non-high security key system. Yale's 5000 Series high security cylinders contain two independent locking mechanisms; the standard 6 or 7 pin tumbler mechanism and a sidebar mechanism which is activated by five slider tumblers.

The combination of these two independent mechanisms within the same cylinder and the simultaneous activation they require offer a highly pick resistant cylinder. Side milled keys used for the cylinders require precision manufacturing, available from Yale. Normally, the regular high security cylinder will fit the needs of

most users, however, a UL listed version for the rim and mortise type cylinder is also available for these installations requiring compliance with UL 437. Three levels of key control are offered for Yale's high security cylinders, each with progressively higher standards of control.

Longevity of a system can also be gained through the use of removable interchangeable core cylinders. Proper supervision of keys in conjunction with the interchangeable core can provide continuous security and extend life of a masterkey system.

Finally, computer key records software system such as Yale's KeyManager system manages and maintains all records of key control. The system replaces manual keying systems, providing quick access to data on Yale locking systems of any size. The system is designed for use in both new and retrofit Yale installations.

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## Commentary

Continued from page 5

*TNL: So the people seemed to like the seminar?*

Hobbs: "They had a ball. They ate it up. There was a lot of interest. The people who conducted the seminar were top notch and had a lot of experience in the field. Most everybody in the room was just kind of hanging on every word. Especially with the approach they took which was that you can be a great service to your community, and that you can make a good buck off it too. And you can help your own business."

Frank Mortell is the owner of Tyrone True Value in Tyrone, GA. He has owned the store for four years and before that was in the LP gas business. Following is an interview with Mr. Mortell.

*TNL: Had you previously done any kind of locksmith work before the seminar?*

Mortell: "None whatsoever. But it has always fascinated me....Steve Spiwak did a tremendous job with the seminar. It was a hands on course. I don't see how anyone could walk away saying that they did not learn something. I learned how to pick locks, how to rekey locks, how to rekey locks for an apartment house where it has one master key. It was without a doubt, a fantastic course."

*TNL: Did you really learn how to pick locks?*

Mortell: "Yes! They supplied everybody with the picker and the tension bar, and you had to keep doing it till you learned how to do it. It was very interesting. I was surprised how easy it was to pick the ordinary household lock I was working on. I was amazed. I just couldn't believe it was that easy."

*TNL: Do you think this is going to help your store open a profitable locksmith service center that you didn't have before?*

Mortell: "Oh most definitely. A lot of times in the past, people have come here and wanted to get locks rekeyed or wanted to buy new locks and wanted them keyed alike. A lot of times I didn't have them keyed alike. They used to go somewhere else to get them or they would go to a locksmith. As a matter of fact, we used to refer them to a local locksmith which we will no longer do."

*TNL: Now you'll be able to do this work yourself?*

Mortell: "That's correct. As a matter of fact, I've already had one inquiry from one of our customers who asked

me to come to his store and rekey his locks....Before he would have had to wait for the locksmith in the town south of us to come to him."

*TNL: Will this help your store get more customers?*

Mortell: "Most definitely. When a customer comes in, I'll be able to do what they need done instead of sending them elsewhere, like to another hardware store or to a locksmith."

*TNL: Do you think that places you in competition with the locksmith where you didn't compete with them before?*

Mortell: "I do. I definitely do. If somebody had a lock problem, I used to tell them to go to a locksmith, but now I won't have to. I can do it myself."

*TNL: Might you add locksmith wording to your yellow pages ad?*

Mortell: "That is very possible. I will get some ad slicks that Ilco will send me that I will advertise in the local phone book and the local newspaper."

Mr. Mortell told me that he ordered a pinning kit, tools, as well as a lock pick set from the order forms supplied to him at the Ilco seminar. Additionally, he read to me a long list of technical books for which he was given an order form. Although the list is too long to reprint here, it contained the following books among many others: *Short Tricks; Padlock Handbook; Practical Tips; How to Make Keys By Impression; Safeman's Guide volumes 1 through 10; Avenues to Good Locksmithing; Burglar-Intruder Alarms; Locksmith's Automotive Guide volumes 1, 2, and 3; Mini Master Systems; Locksmith Law.*

It is interesting to note that all the above book titles are listed in an advertisement in the Locksmith Ledger's 1991 Directory. The ad states that these books are published by Locksmith Ledger.

Tim Gardner is General Manager of Gardner's True Value in Locust Grove, GA.

*TNL: How did you enjoy the seminar?*

Gardner: "It was very enlightening and I learned a lot about the basics of locksmithing and how it works. I hadn't done any locksmith work before, but I am going to seriously look at getting into it. It could be a traffic builder for the store. It is something nice to know."

*TNL: How did you do with lock picking?*

Gardner: "I would say that was the highlight of the seminar. That is something everyone would like to do. It

is intriguing."

Mr. Gardner mentioned to me that he ordered a starter kit from Ilco, including a pin kit and lock picks.

*TNL: Did the instructor mention that he writes for a locksmith magazine?*

Gardner: "Yes he did, but that just went over my head. He mentioned that he helped train personnel and that he wrote some articles, and maybe some books. He did hand out a listing of periodicals that you could subscribe to or write for more information."

*TNL: Before you were able to do lock work did you get calls for it?*

Gardner: "Occasionally, rekeying I've been asked a couple of times. We just told them we couldn't do it. I told them to look in the yellow pages and call the nearest locksmith. Once I get the jist of the trade and feel confident that I can satisfy my customer, then I will refer to myself."

I can certainly understand why True Value stores would like to take this seminar. These are hardworking men, trying to earn a living. I can also comprehend that all manufacturers deserve to sell the maximum amount of products, books, or magazines. I simply ask, is it necessary for Ilco to teach hardware store personnel how to pick locks?

And is it necessary to give True Value hardware stores access to a wide range of locksmith manuals like Locksmith Ledger's ten volumes of the *Safeman's Guide*? Will True Value stores use Locksmith Ledger publications to go into safe service? And why would they need Locksmith Ledger's *Locksmith's Automotive Guide* (volumes 1, 2 and 3)? Will True Value stores attempt to start running automotive service calls too? In fact, Locksmith Ledger magazine itself is made available to hardware stores attending the seminar.

In a recent letter sent to some locksmith organizations, Bill Reed, Publisher of Locksmith Ledger said, "We DO NOT teach seminars to hardware stores....We teach seminars ONLY to qualified locksmiths and/or locksmith students."

Mr. Reed is correct in that the seminars are given by Ilco, not directly by his magazine. However, Ilco owns Locksmith Ledger, and the seminars are taught by Ilco employee Steve Spiwak. (Spiwak is also Locksmith Ledger's Features Editor, listed as such in their masthead all year long, and as recently as their August 1991 issue. My guess, by the way, is that Ledger will remove



him from their masthead as quickly as possible. Check a September Ledger to see if I'm correct.)

Locksmith books published by Locksmith Ledger are marketed to the True Value hardware stores, as has been stated by True Value personnel attending the seminar. I believe you are best qualified to judge the truth. What do you think?

### **Technitips**

*Continued from page 17*

off one end of the tube until the rod lines up with the bottom of the GM key cut to 1-2-3-4-5.

I hope this tip helps other locksmiths.

D.W. Myers  
Colorado

\*\*\*\*\*

### **The Lighter Side**

*Continued from page 70*

mouth shut.

Col. Bullcorn's Second Law: For every credibility gap there is a gullibility fill.

Law of Credibility: People will accept your ideas more readily if you tell them Ben Franklin said it, first.

**Regarding Meetings and Conventions:** Law of Diminishing Odds: Whoever buys the most raffle tickets has the least chance of winning.

The Law of Latecomers: Those who have the shortest distance to travel to a meeting invariably arrive the latest.

**Regarding PRP Testing:** Law of Vanishing Energy: During any examination requiring computations, the batteries in your calculator will go dead.

Basic Law of Knowledge: If you're confident after finishing an exam, it's because you don't know enough to know better.

Proctor's Rule: If you have to ask, you're not entitled to know.

Wormwood's Words of Wisdom: If at first you don't succeed, blame it on your teacher.

Test-taker's Tenet: Don't be misled by the facts. Any statement that is obviously correct must be false.

Law of Class Dynamics: If you are intensely interested in taking only two classes, they will be scheduled at the same time.

O'Toole's Comment on Murphy's Laws: "Murphy was an optimist." §

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